

**NOTICE OF INTENT TO ADOPT A**

**DRAFT MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY**

**ADMIRALTY WAY SETTLEMENT REPAIR**

The County of Los Angeles Department of Public Works has prepared a draft Mitigated Negative Declaration and Initial Study (MND) to assess the potential project impacts to the environment and the community. The proposed project is located within the County of Los Angeles unincorporated area of Marina del Rey.

The proposed project involves reconstructing the existing roadway pavement at Admiralty Way with limits from 800 feet east of Palawan Way to 2,100 feet east of Palawan Way. The proposed project involves removing a minimum 28 inches below the existing grade or finished grade and placing Geogrid, imported granular material, and asphalt concrete. The work also includes reconstructing curbs, gutters, sidewalks, driveways, and the median island, and the removal of ten trees that are in conflict with the road reconstruction work and/or damaging the road, sidewalk, curb, gutter, and planting of ten replacement trees. It also involves restoring the existing street lights, traffic loops, roadway striping, and signage updating. Right-of-way acquisition will not be required.

The improvements are necessary to ensure safety and mobility for both pedestrians and motorists while addressing residents and Beaches and Harbor's concerns regarding the settlement of Admiralty Way.

The draft MND is being circulated for a 30-day public review period. The review period will end October 22, 2011. The 'Admiralty Way Settlement Project MND' document can be viewed online at the Department of Beaches and Harbors webpage at: <http://beaches.lacounty.gov/wps/portal/dbh> under the 'Documents for Public Review' header.

A copy of the document is also available for public review at the following locations:

Marina del Rey Library  
4533 Admiralty Way  
Marina del Rey, CA 90292

County of Los Angeles  
Department of Public Works  
Programs Development Division, 11th Floor  
900 South Fremont Avenue  
Alhambra, CA 91803-1331

Interested parties may submit their comments to:

County of Los Angeles  
Department of Public Works  
Programs Development Division, 11th Floor  
Attention Sarah D. Scott  
PO Box 1460  
Alhambra, CA 91802-1460

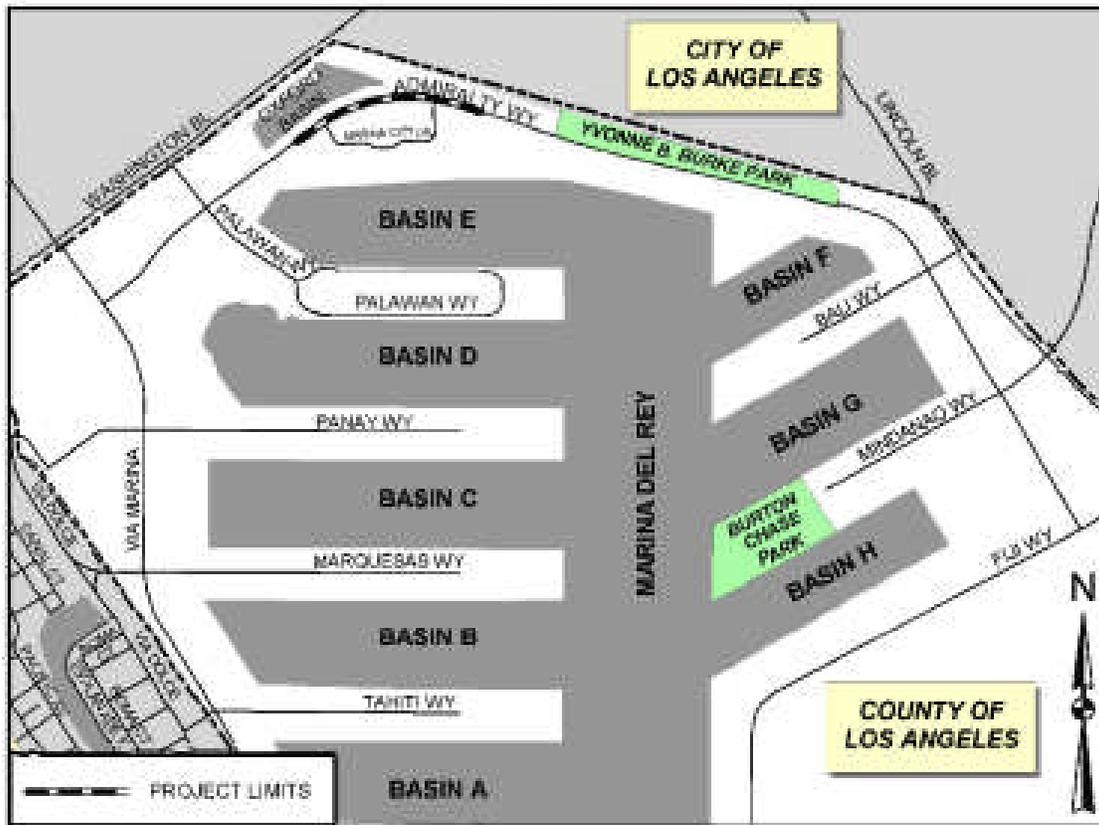
The final MND will incorporate responses to written comments received during the public review period and will be considered by the County of Los Angeles Board of Supervisors for approval.

Questions regarding this notice should be directed to Ms. Sarah D. Scott of our Programs Development Division at (626) 458-3916, Monday through Thursday, between 7 a.m. and 5 p.m. or [sscott@dpw.lacounty.gov](mailto:sscott@dpw.lacounty.gov)

Si necesita asistencia con la traducción a Español, por favor comuníquese con el representante del departamento de Obras Públicas del Condado de Los Angeles, Sr. Art Correa al (626) 458-3948.

Upon 72 hours notice, the Department can provide program information and publications in alternate formats or make other accommodations for people with disabilities. In addition, program documents are available at our main office in Alhambra (900 South Fremont Avenue), which is accessible to individuals with disabilities. To request accommodations ONLY or for more Americans with Disabilities Act information, please contact our Departmental Americans with Disabilities Act Coordinator at (626) 458-4081 or TDD (626) 282-7829, Monday through Thursday, from 7:00 a.m. to 5:30 p.m.

### ADMIRALTY WAY SETTLEMENT PROJECT



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**COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC WORKS**

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**DRAFT  
MITIGATED NEGATIVE DECLARATION  
AND  
INITIAL STUDY FOR  
ADMIRALTY WAY SETTLEMENT  
REPAIR PROJECT**

**PROGRAMS DEVELOPMENT DIVISION  
ENVIRONMENTAL PLANNING AND ASSESSMENTS SECTION**

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**SEPTEMBER 2011**

**COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC WORKS**

**DRAFT MITIGATED NEGATIVE DECLARATION  
FOR  
ADMIRALTY WAY SETTLEMENT REPAIR PROJECT**

I. Location and Brief Description

The County of Los Angeles Department of Public Works is proposing to reconstruct the existing roadway pavement at Admiralty Way with limits from 800 feet east of Palawan Way to 2,100 feet east of Palawan Way (see attached maps). The proposed project is located in the County unincorporated community of Marina del Rey.

The proposed project was prompted by requests from the Department of Beaches and Harbors and local residents in the Marina area over concerns regarding the sinking of the roadway pavement on Admiralty Way in front of the Marina City Club. The proposed improvements would include reconstructing the existing roadway pavement by removing the pavement surface to a minimum depth of 28 inches. A Structural Geogrid would be placed on the bottom of the excavation with 12 inches of imported granular material being placed on top of the Geogrid. A second layer of Geogrid would then be placed on top with 10 inches of Crushed Miscellaneous Base (CMB) to follow. Finally, 6 inches of asphalt concrete will be placed on the CMB. The work also includes reconstructing curbs, gutters, sidewalks, driveways, and the median island, and the removal of ten trees that are either in conflict with the road reconstruction work and/or damaging the road, sidewalk, curb, gutter, and planting of ten replacement trees. It also involves restoring the existing street lights, traffic loops, roadway striping, and signage updating. Right-of-way acquisition will not be required.

The purpose of the proposed project is to repair the segments of the roadway that have slumped. The proposed improvements would improve safety and mobility for both pedestrians and motorists.

II. Mitigation Measures Included in the Project to Avoid Potentially Significant Effects

No significant environmental effects were identified. However, mitigation measures are discussed in Sections I and IV of the Initial Study.

III. Finding of No Significant Effect

Based on the attached draft Initial Study and Attachment A, it has been determined that the proposed project will not have a significant effect on the environment with the identified mitigation measures incorporated.

SDS:re

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Attach.

## DRAFT INITIAL STUDY OF ENVIRONMENTAL FACTORS

1. **Project Title:** Admiralty Way Settlement Repair Project
2. **Lead Agency Name and Address:** County of Los Angeles Department of Public Works 900 South Fremont Avenue, Alhambra, California 91803-1331.
3. **Contact Person and Phone Number:** Ms. Sarah D. Scott (626) 458-3916.
4. **Project Location:** The County of Los Angeles unincorporated community of Marina del Rey.
5. **Project Sponsor's Name and Address:** County of Los Angeles Department of Public Works, 900 South Fremont Avenue, Alhambra, California 91803-1331.
6. **General Plan Designation:** The Los Angeles County General Plan Highway Element designation for Admiralty Way is a secondary highway.
7. **Zoning:** Admiralty Way and the existing right of way are zoned as a secondary highway. The zoning along Admiralty Way in the project area is generally Open Space, Residential V and Hotel.
8. **Description of Project:** The proposed project was prompted by requests from the Department of Beaches and Harbors and local residents in the Marina area over concerns regarding the sinking of the roadway pavement on Admiralty Way in front of the Marina City Club. The proposed improvements would include reconstructing the existing roadway pavement by removing the pavement surface to a minimum depth of 28 inches. A Geogrid would be placed on the bottom of the excavation with 12 inches of imported granular material being placed on top of the Geogrid. A second layer of Geogrid would then be placed on top with 10 inches of Crushed Miscellaneous Base (CMB) to follow. Finally, 6 inches of asphalt concrete will be placed on the CMB. The work also includes reconstructing curbs, gutters, sidewalks, driveways, and the median island, and the removal of ten trees that are either in conflict with the road reconstruction work and/or damaging the road, sidewalk, curb, gutter, and planting of ten replacement trees. It also involves restoring the existing street lights, traffic loops, roadway striping, and signage updating. Right-of-way acquisition will not be required.
9. **Surrounding Land Uses and Settings:**
  - A. **Project Site** – The proposed project is located within the County of Los Angeles unincorporated community of Marina del Rey. Admiralty Way at the project site is aligned within the public road right of way adjacent to Oxford Detention Basin on the northerly side and the Marina City Club on the southerly side.

**B. Surrounding Properties** – In general, the land use surrounding Admiralty Way is a mix of residential open space and commercial properties. The topography of the surrounding project area is generally flat.

**10. Other agencies whose approval is required (and permits needed):** None

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## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or a Less than Significant Impact with Mitigation as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics           | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions        | <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Hydrology/Water Quality            |
| <input type="checkbox"/> Land Use/Planning               | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population/Housing              | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic          | <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a potentially significant impact or potentially significant unless mitigated impact on the environment, but at least one effect a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project would have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Sarah D. Scott  
Signature

9-21-11  
Date

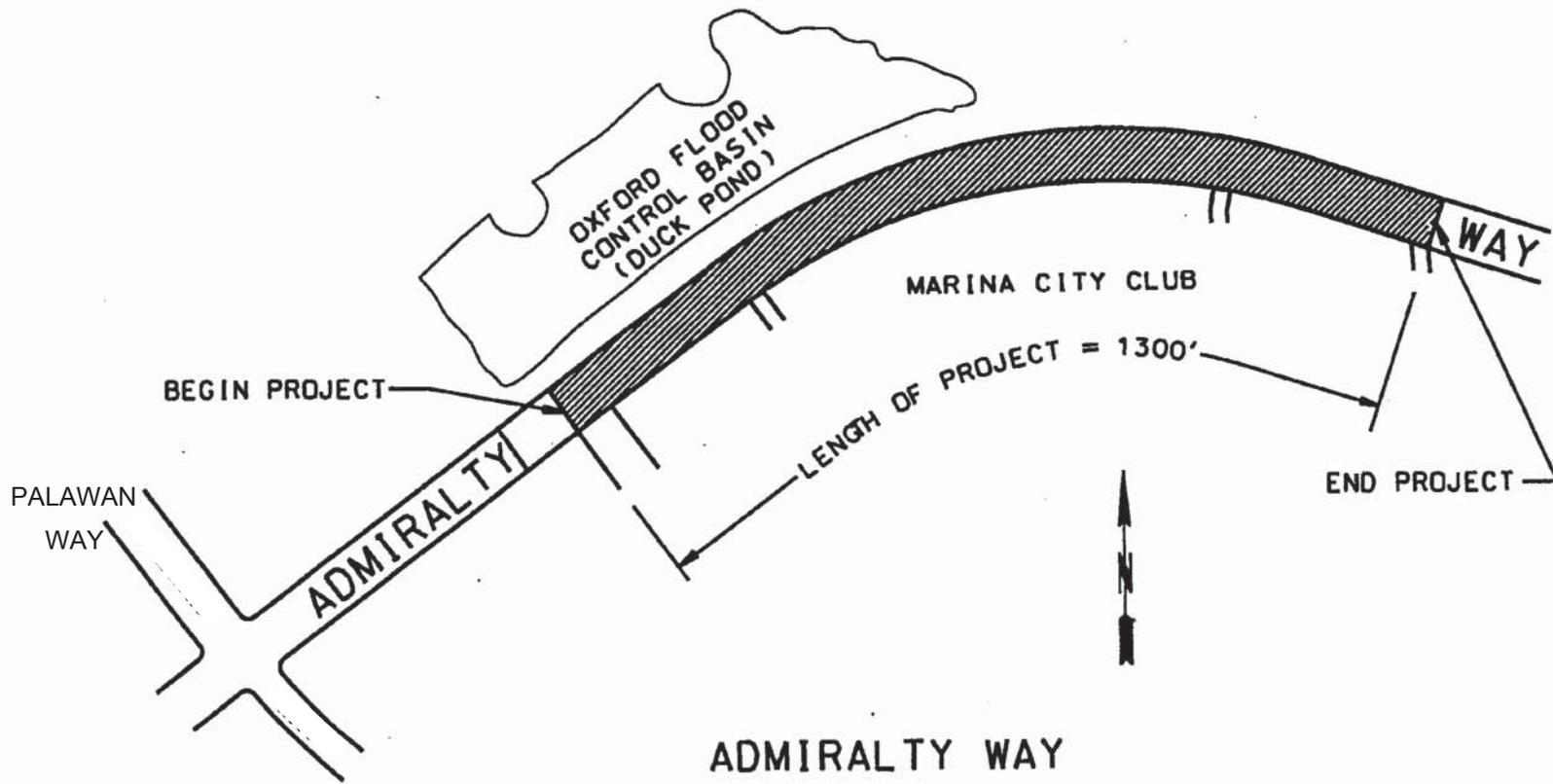
Sarah D. Scott  
Printed Name

LACDPW  
For

## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

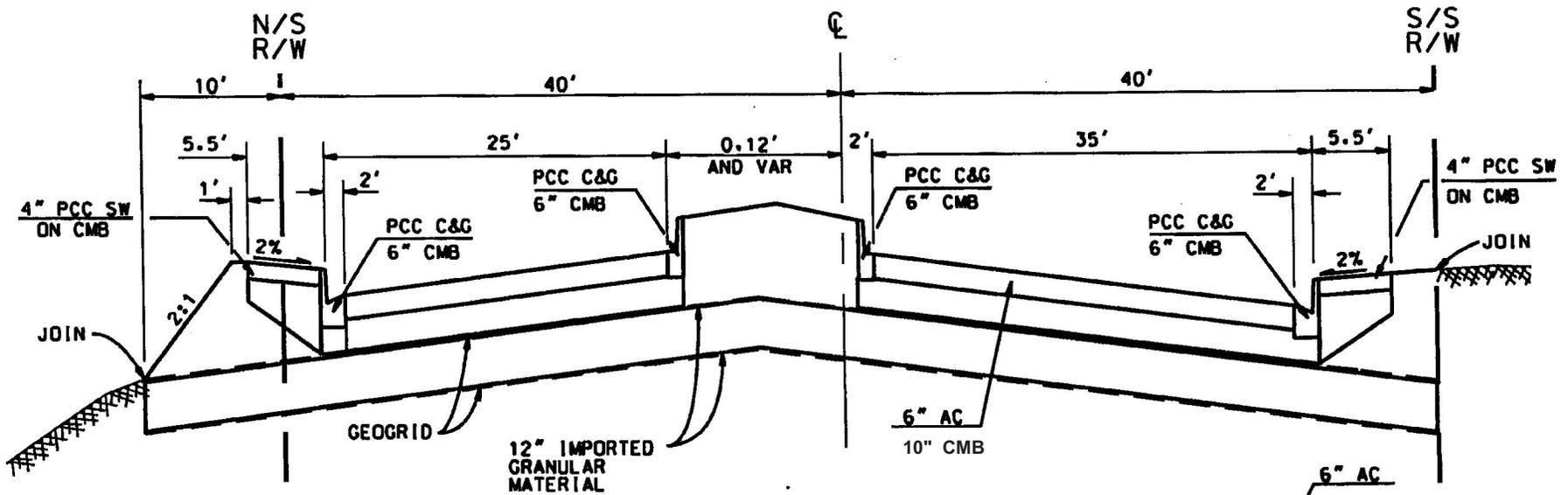
# ADMIRALTY WAY SETTLEMENT REPAIR PROJECT



ADMIRALTY WAY

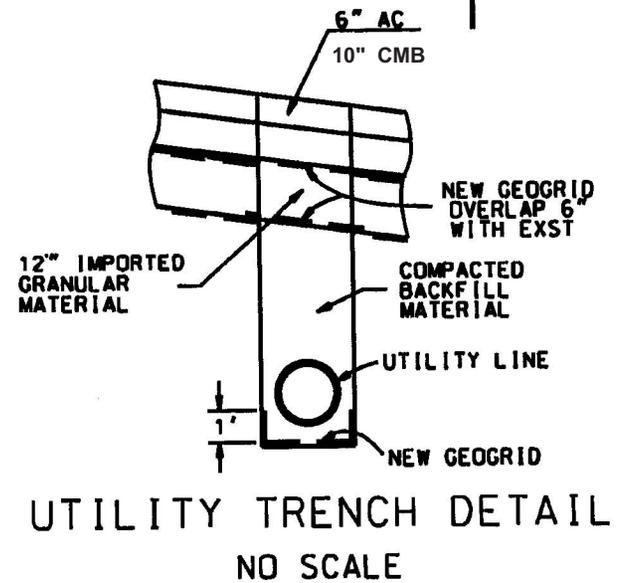
KEY MAP

NO SCALE



TYPICAL SECTION

ADMIRALTY WAY  
NO SCALE



UTILITY TRENCH DETAIL  
NO SCALE



Admiralty Way Settlement Project - Road Reconstruction Limits

**ATTACHMENT A**

**ENVIRONMENTAL CHECKLIST FORM**

**ADMIRALTY WAY SETTLEMENT REPAIR**

The County of Los Angeles Department of Public Works (County) has prepared this draft Mitigated Negative Declaration and Initial Study to address the environmental effects of the proposed Admiralty Way Settlement Repair project. This document has been prepared in accordance with the California Environment Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines California Code of Regulations §15000 *et seq.* The County is the CEQA lead agency for this project.

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

**I. AESTHETICS - Would the project:**

- a) Have a substantial adverse effect on a scenic vista?

The proposed project is not located within any scenic vistas or located with a scenic corridor as designated by the County of Los Angeles Scenic Highway Programs. The nearest adopted Los Angeles County Scenic Highway is Malibu Canyon Road that is over 20 miles away. The nearest officially Designated State Scenic Highway is Angeles Crest Highway that is over 20 miles away. The proposed project involves reconstruction of the existing roadway pavement. There would be a less than significant impact.

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The proposed road reconstruction project is located north of the Marina del Rey marina and west of Admiralty Way Park. As discussed in Item 1(a) above, the site is not located within a Scenic Highway as designated by the County of Los Angeles or by the State of California. There are no rock outcroppings, historic buildings or scenic resources within or adjacent to the road reconstruction project limits. Ten nonnative California trees will be removed along the project limits. All of these trees are in conflict with the excavation work required for the road reconstruction project. The trees are being removed since the construction excavation work will likely cause fatal damage to the trees and their root systems. Six of these ten trees are damaging the curb, gutter, and sidewalk. Two trees on the south side of Admiralty Way and one from the median will be removed. Seven trees (all nonnative) to be removed are on the north side of Admiralty Way in the Oxford Basin, adjacent to Admiralty Way. The tree removal work will be performed in accordance with the Conservation & Management Plan of Marina del Rey guidelines including biological surveys as discussed in Section IV (a). It is noted that there are numerous other trees remaining in the project area, which will maintain the areas overall views and scenery. In addition, the following mitigation measures would result in the project having a less than significant impact.

**Mitigation Measure AES-1:** Ten California Native trees (15 gallon) will be planted in Burke Park, 600 feet east of the project, to replace the ten trees removed as a part of this project (See Appendix A). The tree removal and replanting work will be implemented in accordance with the guidelines and requirements of the 'Conservation and Management Plan for Marina del Rey, Los

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

Angeles County California, August 19, 2010.' All necessary notifications, biological surveys, and post planting monitoring reports will be performed. < [http://file.lacounty.gov/dbh/docs/cms1\\_150561.pdf](http://file.lacounty.gov/dbh/docs/cms1_150561.pdf) >

- c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The proposed project would not degrade the existing visual character or the site or its surroundings. The project consists of reconstructing the roadway pavement on Admiralty Way with limits from 900 feet east of Palawan Way to 2,200 feet east of Palawan Way. As discussed in 1 (b) above, ten nonnative trees will be removed within the boundary area of the project. Ten new trees will be planted in Burke Park for mitigation. The views from the surrounding neighborhoods would not be altered by the project. Therefore, impacts to the visual character would be considered less than significant.

- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project would not include additional lighting systems or structures that could result in glare. The reconstructed roadway pavement, curb, gutter, and sidewalk will not create a new source of glare. No construction will occur at night. Therefore, the project will have no impact on day or nighttime views in the area.

**II. AGRICULTURE AND FORESTRY RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation, as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

State CEQA Statutes [(§21060.1(a)) Public Resources Code 21000-21177)] define agricultural land to mean "prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture (USDA) land inventory and monitoring criteria, as modified for California." The proposed project surroundings area consists of developed commercial and residential areas. The project location is not used for agricultural purposes or as a farmland. Thus, the project will have no impact on farmland.

- b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

The proposed project will not conflict with any zoning for agricultural use and will have no impact. According to the California Department of Conservation, Division of Land Resource Protection, the 40,031 acres of Williamson Act parcels in the County of Los Angeles are on Santa Catalina Island.

- |  | Potential Significant Impact | Less than Significant Impact With Mitigation | Less Than Significant Impact | No Impact                           |
|--|------------------------------|--|------------------------------|-------------------------------------|
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/>     | <input type="checkbox"/>                     | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

The proposed project will not conflict with existing zoning or cause rezoning of forest land, timberland or timberland zoned Timberland Production.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

The proposed project will not result in the loss of forest land or the conversion of forest land to nonforest use.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

The proposed project would not involve any conversions of farmland to nonagricultural use or conversion of forest land to nonforest use. No construction or changes in land use are proposed.

**III. AIR QUALITY** - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

The proposed project is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws, regulations, and policies in the Basin. The Basin is classified as an area of nonattainment for Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and Ozone. The governing air quality management plan is the 2007 Air Quality Management Plan (AQMP). The Southern California Association of Government's (SCAG) population projections and land use designations are the basis of the AQMP. If a project results in population or employment growth that exceeds the AQMP growth estimates for the area, it would be inconsistent with the AQMP. This roadway pavement maintenance project will not affect population or employment growth. Therefore the proposed project would not result in population or employment growth and would not conflict with or obstruct implementation of the applicable air quality plan. There would be no impact.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

With regard to current air quality conditions, Los Angeles County is designated as a federal and State nonattainment area for ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>, and a federal maintenance area for CO and NO<sub>2</sub>. The SCAQMD, the regional agency that regulates stationary sources, maintains an extensive air quality monitoring network to measure criteria pollutant concentrations throughout the Basin.

Potential  
Significant Impact

Less than  
Significant Impact  
With Mitigation

Less Than  
Significant Impact

No Impact

The project site is situated in SRA 2 Northwest Los Angeles County Coastal Air Monitoring region. Projects located in the same SRA are subject to similar weather patterns and ambient emission levels. The nearest SCAQMD monitoring site to the project is located in Los Angeles on West Westchester Parkway, approximately 3 miles southeast of the project site. However, this site only monitors the pollutants of concern, ozone, CO, and PM<sub>10</sub>. The nearest site that monitors PM<sub>2.5</sub> is located in Compton approximately 15 miles southeast of the project site. Table 1 summarizes the composite of gaseous pollutants monitored from 2007 through 2009.

**Table 1 Ambient Air Quality Monitoring Summary**

Air Pollutant	2007	2008	2009
<b>Carbon Monoxide (CO) – Westchester Parkway</b>			
Max 8 Hour (ppm)	2.39	2.53	1.99
Days > NAAQS (9 ppm)	0	0	0
Days > CAAQS (9.0 ppm)	0	0	0
<b>Ozone (O<sub>3</sub>) – Westchester Parkway</b>			
Max 1 Hour (ppm)	0.087	0.086	0.077
Days > CAAQS (0.09 ppm)	0	0	0
Max 8 Hour (ppm)	<b>0.076</b>	<b>0.076</b>	0.070
Days > NAAQS (0.08 ppm)	0	0	0
Days > CAAQS (0.070 ppm)	1	1	0
<b>Particulate Matter (PM<sub>10</sub>) – Westchester Parkway</b>			
Max Daily California Measurement	<b>128</b>	50	<b>52</b>
Days > NAAQS (150 µg/cubic meter)	0	0	0
Days > CAAQS (50 µg/cubic meter)	3	0	1
<b>Particulate Matter (PM<sub>2.5</sub>) – Westchester Parkway</b>			
Max Daily National Measurement	n/a	<b>44.2</b>	<b>69.2</b>
Days > NAAQS (35 µg/cubic meter)	n/a	2	3
Abbreviations: > = exceed      ppm = parts per million      µg = micrograms CAAQS = California Ambient Air Quality Standard NAAQS = National Ambient Air Quality Standard Standard Mean = Annual Arithmetic Mean <b>Bold</b> = exceedance Source: CARB 2009			

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

The monitoring data shows that there were no violations of CO, State 1-hour ozone, and federal ozone in the most recent three years; however, data shows that the station exceeded State 8-hour ozone standard in two of the years. The station also exceeded the federal PM<sub>2.5</sub> standard in both years it was measured. The State PM<sub>10</sub> standard was exceeded in 2007 and 2009 but the federal PM<sub>10</sub> standard was not exceeded.

Air quality impacts are divided into short-term and long-term impacts. The proposed project will generate air pollutant emissions during the road reconstruction activities (short-term) only. Short-term pollutant emissions would be produced from construction equipment and dust from grading and earth moving activities. Construction-related emissions and dust would be emitted only during the project construction, which will take approximately four months. Construction activities will primarily generate dust, carbon monoxide, and nitrogen oxide emissions.

To estimate if the project may adversely affect air quality in the region, the SCAQMD has prepared the California Environmental Quality Act (CEQA) Air Quality Handbook to provide guidance to those who analyze the air quality impacts of proposed projects. Based on Section 182(e) of the Federal Clean Air Act, the SCAQMD has set CEQA significance thresholds for potential air quality impacts. Construction Significance Thresholds are shown in Table 2.

**TABLE 2 CONSTRUCTION SIGNIFICANCE THRESHOLDS**

<b>Pollutant</b>	<b>Construction</b>
<b>NOx</b> (Nitric Oxide & Nitrogen Dioxide)	100 lbs/day
<b>VOC</b> (Volatile Organic Compound)	75 lbs/day
<b>PM<sub>10</sub></b> (Particulate matter less than 10 micrometers in diameter)	150 lbs/day
<b>PM<sub>2.5</sub></b> (Particulate matter less than 2.5 micrometers in diameter)	55 lbs/day
<b>SOx</b> (Sulfur Oxide)	150 lbs/day
<b>CO</b> (Carbon Monoxide)	550 lbs/day

Daily construction emissions for this project were calculated using the URBEMIS 2007 computer model developed by the California Air Resource Board based in part, on SCAQMD CEQA Air Quality Handbook. URBEMIS computes emissions of reactive organic gases (ROG), NO<sub>x</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and CO<sub>2</sub>. URBEMIS calculations include construction worker trips for different construction phases. Calculations assume the construction duration would be approximately four months. Excavation, grading, backfill, roadway, and sidewalk reconstruction are assumed to occur simultaneously, resulting in the worst case scenario. Calculated unmitigated construction emissions are provided in Table 3 as shown below.

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

**TABLE 3 UNMITIGATED CONSTRUCTION EMISSIONS (POUNDS/DAY)**

Pollutant	Construction Threshold (lbs/day)	Estimated Emissions (lbs/day)	Exceed Threshold?
<b>NOx</b> (Nitric Oxide & Nitrogen Dioxide)	100	88	No
<b>VOC</b> (Volatile Organic Compound)	75	7	No
<b>PM<sub>10</sub></b> (Particulate matter less than 10 micrometers in diameter)	150	53	No
<b>PM<sub>2.5</sub></b> (Particulate matter less than 2.5 micrometers in diameter)	55	10	No
<b>SOx</b> (Sulfur Oxide)	150	<1	No
<b>CO</b> (Carbon Monoxide)	550	40	No

The construction equipment that will be involved in this work would include graders, dozers, haul trucks, jack hammers, concrete saws, water trucks, concrete trucks, crew vehicles, backhoe, delivery trucks, asphalt paving machines, and asphalt trucks.

As shown in Table 3, the construction emissions generated by the proposed project do not exceed the significance thresholds.

During construction activities the contractor is required to implement Best Management Practices (BMPs) including all applicable requirements of SCAQMD Rule 403, Fugitive Dust. The following measures are included to reduce dust generation and air pollution:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp, or other suitable cover in accordance with BMP WE-1, Wind Erosion Control, (see Appendix B).
- The plans and specifications will require the contractor to comply with BMP WM-3 Stockpile Management, BMP TC-1 Stabilized Construction Entrance/Exit (See Appendix B)
- Minimize idling time and limit the hours of operation of heavy duty equipment and/or the amount in use
- All trucks used to haul soil from the site will be covered to reduce fugitive dust in accordance with Section 23114 of the California Motor Vehicle Code.

In view of the estimated construction emissions as shown in Table 3 Unmitigated Construction Emissions, and the BMP's employed, the impacts to air quality would be less than significant.

- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The project is within the SCAQMD, which is nonattainment for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. The emissions generated as a result of the proposed project are temporary and will occur

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

only during construction. The project specifications will require the contractor to comply with Federal and State emission control regulations. As discussed above, the proposed project would result in increases in criteria pollutants during construction. However, during construction air quality impacts would be less than SCAQMD thresholds for nonattainment pollutants and implementation of the proposed project would not result in a cumulative considerable increase of any criteria pollutant for which the project region is in nonattainment. Accordingly, net increases of nonattainment pollutants would be less than significant for the proposed project.

- d) Expose sensitive receptors to substantial pollutant concentrations?

As described in Response III (b) above, construction of the proposed project would not result in any substantial localized or regional air pollution impacts and therefore would not expose any nearby sensitive receptors to substantial pollutant concentrations. There is a rehabilitation center and retirement community south of the project site. The nearest school is 0.25 miles away. These and other residents that front the south side of the project may be subjected to dust and construction equipment emissions during the project construction. The project specifications would require the contractor to control dust by appropriate means such as BMP WM-3, Stockpile Management, BMP WE-1 Wind Erosion Control, and BMP TC-1 Stabilized Construction Entrance/Exit, (see Appendix B) and comply with all applicable air pollution control regulations. As described in III (a) the air pollutants or emissions generated by construction of the proposed project would not exceed SCAQMD's significant thresholds and would further dissipate prior to reaching any sensitive receptors posing a less than significant impact. Therefore, impacts to air quality in relation to the exposure of nearby residents to substantial pollutant concentrations are expected to be below the level of significance. Incorporation of BMP's would serve to further reduce potential impacts.

- e) Create objectionable odors affecting a substantial number of people?

Objectionable odors may be generated from exhaust fumes of diesel trucks and construction equipment during construction activities. These types of odors would be short-term and temporary. The use of diesel powered equipment would occur only during the construction period and the proposed project would implement BMP's during construction (such as shutting off equipment when not in use and limiting idling time in accordance with State law) that would further reduce this potential impact to nearby residents. The operation of the proposed project would not include any long-term operation of any new sources of odor. Thus, the impact is considered less than significant.

**IV. BIOLOGICAL RESOURCES - Would the project:**

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Based on the November 2010 biological surveys completed in the surrounding area it was determined that birds and nests were found to be in the vicinity of the project area. This would include Egret and Heron Rookeries 50 feet north of the eastern portion of the project site. The Snowy Egret is on the United States Bird Conservation Watch list and

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has been breeding in these trees since 2005. The Black-crowned Night Heron is listed as a sensitive species by the Bureau of Land Management and has been breeding in these trees since 1995. Ambient peak noise levels were monitored near these nesting sites in June 2008 and registered peak noise levels of 104.3 dB. There would be a less than significant impact with incorporation of the following mitigation measure.

**Mitigation Measure BIO-1:** Prior to project construction a qualified biologist will perform a preconstruction bird survey for nesting migratory birds in the project area and also including the ten trees to be removed in the project. If these species, or any candidate, sensitive, or special status species are found within 300 feet of the project area a biologist will monitor the activity of the nesting birds. Construction noise shall not exceed 85 dB or peak preconstruction ambient noise levels at any active nesting site. If the highest value of these construction noise levels are exceeded the biologist will monitor as long as the nest is active and will ensure that sound mitigation measures such as sound shields, sound walls, or blankets around engines shall be used. If these sound mitigation measures do not reduce noise levels, construction within 300 feet of the nesting birds shall cease and shall not recommence until either new sound mitigation can be employed or nesting is complete. Therefore, with this mitigation measure, the proposed project impacts are expected to be considered less than significant.

As stated above, herons and egrets have been observed to nest at the easterly portion of the project site and could be disturbed by the construction noise. On page 5-11 of the Conservation and Management Plan for Marina del Rey, Los Angeles County California, August 19, 2010, it states "...that levels in excess of 100 dB have been recorded at heron and egret nests near Oxford Basin with no apparent adverse effects (Chambers Group)." Interference with nesting herons and egrets would be a significant impact. This impact would be reduced to less than significant with implementation of the following mitigation measure.

**Mitigation Measure BIO-2:** A qualified biologist shall be present during all activities that involve heavy construction near heron and egret rookeries. The biologist shall monitor noise and bird behavior during construction activity that involve heavy equipment. Construction noise shall not exceed 85 dB or peak preconstruction ambient noise levels at any active nesting site. If construction noise exceeds the highest value of either the peak preconstruction ambient normal noise levels recorded at the rookeries or 85 dB sound mitigation measures such as sound shields, sound walls or blankets around engines shall be used. If these sound mitigation measures do not reduce noise levels and/or disturbance to the nesting birds, construction within 300 feet of the nesting trees shall cease and shall not recommence until either new sound mitigation can be employed or nesting is complete.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No riparian habitat or other sensitive natural communities are present in the project limits. The normal water level boundary of the Oxford Basin, a flood control facility, lies 50 feet north of the project work area. Ornamental Landscaping is the dominant plant

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

community on the bank of Oxford Basin adjacent to the road reconstruction project. This plant community adjacent to the work area is not considered riparian or sensitive habitat as it includes areas where the vegetation is dominated by nonnative horticultural plants consisting of introduced trees, shrubs, flowers, and turf grass. Plant species found along this area typical of this community include eucalyptus trees, coral trees, Chinese Banyan Trees, and an understory of nonnative annual grasses, and forbs (i.e. turf grass rigput brome, common sow thistle as well as other exotic landscaping). Therefore, a less than significant impact would occur.

- c) Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

There is no potential for wetlands to occur in the construction area, as the surfaces in the vicinity of the roadway are either impermeable hardscape or nonnative trees and shrubs. The nearest wetlands lie 50 feet north of the project limits within the normal water level boundary of Oxford Basin. To reduce impacts during project construction, temporary exclusion fencing will be installed eight feet north of the project work area boundary on the bank of the Oxford Basin in accordance with BMP SS-2, Preservation of Existing Vegetation (See Appendix B). With the implementation of this BMP the proposed project would not have a substantial adverse effect on any federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

- d) Interfere substantially with the movement of any native resident, migratory fish, or wildlife species; or with established native resident or migratory wildlife corridors; or impede the use of native wildlife nursery sites?

There are no wildlife corridors within the project work area. Adjacent to the work area, is Oxford Basin, which is surrounded by urban development and primarily supports urban-associated wildlife. Oxford is not considered a significant migration pathway. Oxford Basin is at the back of Marina del Rey, which is not a migration corridor for fish.

As discussed above in a), herons and egrets breed in trees near the Oxford Basin and potentially could nest in trees within the project area. Other bird species could breed within Oxford Basin. Mallards, Anna's hummingbirds, and American crows were observed breeding within Oxford Basin in recent surveys. Interference with nesting birds including nesting herons and egrets would be a significant impact. This impact would be reduced to less than significant with implementation of **Mitigation Measures BIO-1 and BIO-2**.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As described in I b. and IV d., the improvements to Admiralty Way would necessitate the removal of ten trees. Mitigation Measure AES-1 provides for planting of ten trees in Burke Park. The tree removal and replanting work will be performed in accordance with the Conservation and Management Plan for Marina del Rey guidelines. This will include biological surveys, notification to the Department of Beaches and Harbors, and submittal of tree replacement monitoring reports. Thus, the proposed project would not conflict with any local policies or ordinances protecting biological resources.

- |    |   |                              |  |                                     |                          |
|----|---|------------------------------|--|-------------------------------------|--------------------------|
|    |   | Potential Significant Impact | Less than Significant Impact With Mitigation | Less Than Significant Impact        | No Impact                |
| f) | Conflict with the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan? | <input type="checkbox"/>     | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The project will be implemented in accordance with the Conservation and Management Plan for Marina del Rey guidelines with regards to the tree removal, tree planting and construction near egret, heron, water bird or raptor nesting sites. With these compliance measures, the proposed project will not conflict with local policies or ordinances protecting biological resources. There will be a less than significant impact.

**V. CULTURAL RESOURCES** - Would the project:

- |    |  |                          |                          |                                     |                          |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) | Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

The old Venice dump lies below the existing road prism being covered with fill and existing road base and pavement. The 20 borings performed at this site identified only pavement, aggregate base, and sediment to the project excavation depth of 28 inches. No evidence of material from the Venice dump was found in these borings. The search of available historical records in the project limits indicates that no cultural resource sites were identified adjacent to or within the work area. The road reconstruction project involves removing the existing pavement and road base material to a depth of 28 inches and placement of two layers of structural Geogrid, crushed miscellaneous base, and asphalt concrete. As all of this work is occurring the in previously disturbed area of the original road. The proposed project would not cause a significant adverse change in the significance of a historical resource. No physical demolition, destruction, relocation, or alteration of any historical resource or its immediate surroundings is proposed. A less than significant impact will occur.

- |    |   |                          |                          |                                     |                          |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) | Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

The old Venice dump lies below the existing road prism as it is covered with fill and existing road base and pavement. As stated above, the project site has been disturbed with the construction of the road. The 20 boring performed at the site yielded no evidence of any materials from the dump or any other archaeological resources. The proposed construction would involve removing the existing pavement and road base material to a depth of 28 inches and placement of structural Geogrid, crushed miscellaneous base, and asphalt concrete. This work will not cause a substantial adverse change in the significance of an archaeological resource. However, if any archaeological resources are discovered during construction, the contractor will cease all construction activities in accordance with Section 6-3.2 of the Standard Specifications for Public Works Construction as stated in Section 2-5.1.2 of the Project Special Provisions. The County will subsequently have a specialist examine the project site for cultural resources. Thus, the effect of the proposed project on these resources is considered less than significant.

- |    |  |                          |                          |                                     |                          |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

The proposed construction would involve removing the existing pavement and road base

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

material to a depth of 28 inches and placement of structural Geogrid, crushed miscellaneous base, and asphalt pavement. The work is within the disturbed area of the existing road prism, which was constructed above the fill over the Old Venice Dump. Hence, it is unlikely that any paleontological resources or any unique geologic features exist within the project limits. This work will not directly or indirectly destroy any paleontological resources or alter any unique geologic features. A less than significant impact will occur.

- d) Disturb any human remains, including those interred outside of formal cemeteries?

The proposed construction would involve removing the existing pavement and road base material to a depth of 28 inches and placement of structural Geogrid, crushed miscellaneous base, and asphalt pavement. The work is within the disturbed area of the existing road prism, which was constructed above the fill over the Old Venice Dump. The data from the 20 borings indicate that no human remains are likely to exist within the project limits. However, if any human remains are discovered during construction, the contractor will cease all construction activities in accordance with Section 6-3.2 of the Standard Specifications for Public Works Construction as stated in Section 2-5.1.2 of the Project Special Provisions. The County will subsequently have the Coroner examine the project site for human remains. This work is not likely to disturb any human remains, including those interred outside of formal cemeteries. A less than significant impact will occur.

**VI. GEOLOGY AND SOILS**

The proposed project is located in the County of Los Angeles unincorporated community of Marina del Rey. Marina del Rey is located on the coastal plain of the Los Angeles basin, with the Santa Monica Mountains on the north and the Baldwin Hills on the south and east. The Santa Monica Mountains compose the central portion of the Transverse Ranges of Southern California, running from Point Arguello (north of Santa Barbara) into the Mojave Desert. The Transverse Ranges consist of several large areas of seismically active uplifted basement rocks. The Baldwin Hills represent a surface expression of the Newport/Inglewood Fault, formed over the past several million years. To the west of the Baldwin Hills is the Ballona Escarpment, created over time by erosion activity of Ballona Creek.

Marina del Rey is generally located on what is known as the Southwestern Block of the Los Angeles basin (the portion of the basin south of the Santa Monica Mountains), which consists chiefly of marine clastic 1 and organic sedimentary strata of middle Miocene to Recent age, including igneous rocks of middle Miocene age. The lower sequence generally consists of marine sandstone, siltstone, and minor amounts of conglomerate, deposited in a shallow marine environment.

Marina del Rey is located in the near vicinity of two major fault systems, the Santa Monica Fault zone and the Newport Inglewood fault zone. The Santa Monica Fault zone is comprised of several major active faults, including the Malibu Coast fault, located some 7 miles northwest of the project site and capable of generating a magnitude 7.0 earthquake, as well as the Santa Monica, Hollywood, Raymond, Sierra Madre, and Cucamonga Faults. The active Hollywood Fault runs along the southern edge of the Santa Monica Mountains to the North. The active Newport-Inglewood Fault Zone, which includes the nearby Charnock and Overland faults, runs from off the coast of Newport Beach to Culver City, and is responsible for the chain of low hills

extending from Signal Hill to the Baldwin Hills. Each of these fault zone systems is capable of producing large earthquakes, with a maximum credible earthquake estimated as a magnitude 7.5 event on the Santa Monica–Hollywood Fault and a 7.4 event on the Newport-Inglewood Fault. Both of these would result in severe earthshaking in the project area. The project area is not located within a State of California Earthquake Fault Zone (Alquist-Priolo Special Studies Zone).

- Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a know fault? Refer to Division of Mines and Geology Special Publication 42.

The proposed road reconstruction project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazards of surface faulting and fault rupture to built structures. Fault rupture generally occurs within 50 feet of an active fault line and is limited to the immediate area of the fault zone where the fault breaks along the surface. Because the project site is not located within an Alquist-Priolo Earthquake Fault Zone, a less than significant impact would occur from fault rupture.

ii) Strong seismic ground shaking?

The proposed road reconstruction project would be located in the vicinity of the Santa Monica Fault/Newport Inglewood fault zone systems. Each of these fault zone systems is capable of producing large earthquakes, with a maximum credible earthquake estimated as a magnitude 7.5 event on the Santa Monica–Hollywood Fault and a 7.4 event on the Newport-Inglewood Fault. Both of these could result in strong seismic ground shaking in the project area. However, the project involves reconstruction of the existing roadway and will not constitute an additional risk significantly greater than the risk already present in the Marina del Rey area. There would be a less than significant impact.

iii) Seismic-related ground failure, including liquefaction?

The proposed road reconstruction project is located in an area designated as having high liquefaction potential because of shallow depth to groundwater in the near proximity of the marina. However, the road reconstruction project will not constitute an additional risk beyond that which is already present in the Marina del Rey area.

iv) Landslides?

The proposed project location is in a residential and commercial area, consisting of relatively flat terrain; it does not contain any geologic features (i.e., hills or mountains), which may result in landslides. Therefore, the project will have no impact on landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Construction of the proposed project would not result in soil erosion or loss of topsoil.

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Less than Significant Impact With Mitigation  
Less Than Significant Impact  
No Impact

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

The proposed road reconstruction project involves excavation of the existing pavement and road base and installation of Geogrid, road base and pavement. No topsoil will be affected by this work. The project specifications will require the contractor to properly control erosion as well as compact the road base and dispose of any excess excavated materials. Therefore, the impact of the proposed project to the loss of the soil or erosion would be considered less than significant.

During construction activities the contractor is required to implement BMP's to stem any erosion of construction materials from the site. This will include:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized using water, chemical stabilizer/suppressant, covered with a tarp, or other suitable cover in accordance with BMP WE-1, Wind Erosion Control, (see Appendix B).
- The plans and specifications will require the contractor to comply with BMP WM-3 Stockpile Management, BMP TC-1 Stabilized Construction Entrance/Exit (see Appendix B).

- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

This section of roadway is known to have been built on the former Venice Dump landfill. The settlement of the roadway seems to be caused by the quality of the fill material and the underlying soft clay and silts. The proposed project improvements would include reconstructing the existing roadway pavement by removing the pavement surface to a minimum depth of 28 inches. Then a layer of Geogrid would be placed on the bottom of the excavated material with 12 inches of imported granular material being placed on top of the Geogrid. A second layer of Geogrid would then be placed on top with 10 inches of Crushed Miscellaneous Base (CMB) to follow. Finally, 6 inches of asphalt concrete will be placed on the CMB. The proposed improvements will stem the historic settlement of the roadway pavement. In addition, while the project is located in a potential liquefaction zone, the project would neither increase overall exposure to such an event nor increase the probability of such an event occurring. The project will have a less than significant impact on unstable soil.

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Expansive soils generally result from soils such as clay, claystone, and shale that expand when saturated and shrink in volume when dry. Expansive soils can cause cracking and damage in paved surfaces, building walls, and foundations. The late Holocene flood plain deposits and artificial fill that characterize the soils in the project area typically consist of unconsolidated sandy or silty alluvium and engineered and nonengineered fill material (California Geologic Survey 1998). The borings performed along the project limits indicated the fill under the existing road pavement and base consists primarily of sand, silty sand and clayey sand materials. As such, the expansion potential is considered to be low. There would be a less than significant impact.

Potential Significant Impact

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Less Than Significant Impact

No Impact

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

There are no septic tanks or sewer pipes at the project site. Therefore, the project will have no impact on the use of septic tanks or alternative waste disposal systems.

**VII. GREENHOUSE GAS EMISSIONS**

CEQA requires lead agencies to evaluate potential environmental effects based to the fullest extent possible on scientific and factual data. Significance conclusions must be based on substantial evidence, which includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. The project will generate emissions of carbon dioxide (CO<sub>2</sub>) in the form of vehicle exhaust during construction.

The California Air Resources Board has statutory responsibility to maintain a statewide inventory for California Greenhouse Gas (GHG) emissions. The GHG inventory compiles statewide anthropogenic GHG emissions and sinks. It includes estimates for CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons, and perfluorocarbons.

The Global Warming Potential (GWP) is the potential of a gas or aerosol to trap heat in the atmosphere. Individual GHG compounds have varying GWP. The reference gas for the GWP is CO<sub>2</sub>; CO<sub>2</sub> has a GWP of one. The calculation of the CO<sub>2</sub> equivalent (CO<sub>2</sub>e) is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent metric. Methane's warming potential of 21 indicates that methane has a 21 times greater warming affect than CO<sub>2</sub> on a molecule per molecule basis. A CO<sub>2</sub>e is the mass emissions of an individual GHG multiplied by its GWP. GHGs are often presented in units called million metric tons (MMT) of CO<sub>2</sub>e (MMT CO<sub>2</sub>e). The current inventory covers years 2000 to 2006. The Inventory shows 186 MMT CO<sub>2</sub>e for the Transportation sector, 106 MMT CO<sub>2</sub>e for the Electric Power sector, 44 MMT CO<sub>2</sub>e for the Commercial and Residential sector, 96 MMT CO<sub>2</sub>e for the Industrial sector, 6 MMT CO<sub>2</sub>e for the Recycling and Waste sector, 15 MMT CO<sub>2</sub>e for the high GWP sector, and 30 MMT CO<sub>2</sub>e for the Agriculture sector in 2006.

- Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

On September 27, 2006, Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, was enacted by the State of California in order to address global climate change by reducing greenhouse gases. Assembly Bill 32 (AB 32) limits GHG emissions for 2020 based on 1990 emission levels and directs California Air Resources Board to develop significance thresholds. Gases known to contribute to the Greenhouse Effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), ozone, nitrous oxide (N<sub>2</sub>O), water vapor, hydrofluorocarbons, chlorofluorocarbons, and sulfur hexafluoride. According to the report "California's Greenhouse Gas Emissions and Sinks: 1990 to 2004", the principal greenhouse gas in California is carbon dioxide, accounting for over 80 percent of the GHG emissions.

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

There are no thresholds of significance or specified methodology contained in the CEQA Statue or Guidelines for performing an impact analysis on GHG emissions. An estimate of the GHG emission for the project is presented below. For comparison purposes the SCAQMD significance threshold for GHG emissions is included for reference. Again, this analysis is for information and discussion purposes only as quantitative GHG guidelines and thresholds have not been specified in CEQA.

**TABLE 4 - ESTIMATE OF PROJECT –RELATED GREENHOUS GAS EMISSIONS  
 (metric tons of Carbon Dioxide Equivalent (MTCO<sub>2</sub>e) per year)**

Project Emissions	Carbon Dioxide Equivalent (MTCO <sub>2</sub> e)
Project Construction Total Emissions	273
SCAQMD Significance Threshold	3,000
Threshold Exceeded?	No

The proposed project consists of reconstructing the existing roadway pavement on Admiralty Way between 900 feet east of Palawan Way and 2,200 feet east of Palawan Way. No development construction is proposed. The proposed roadway improvements are needed due to settling of the roadway at this location. Any construction or development resulting from repair activities would be subject to environmental review. Following construction, the proposed project would not result in any new sources of GHG emitters, nor would the proposed project create a new use that would attract vehicle trips that otherwise would not occur. As shown above in Table 4, Estimate of Project Related GHG, the GHG emitted during the project is less than the SCAQMD Significance Threshold. Therefore, the proposed project will generate GHG emissions that have a less than significant impact on the environment.

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed project will not conflict with any applicable plans, polices or regulations adopted for the purpose of reducing the emissions of GHG. No new development is proposed. Any new construction or development resulting from the proposed project would be subject to environmental review. In addition, the GHG emissions presented above in Response VII (a) indicate a less than significant impact with respect to comparable thresholds. Therefore, the proposed project will have a less than significant impact on the environment.

The following discussion is provided for information purposes regarding the County of Los Angeles Energy and Environmental Policy:

**County of Los Angeles Energy and Environmental Policy**

On January 16, 2007, the County of Los Angeles adopted the Energy and Environmental Policy to increase energy efficiency, improve air quality, and address global warming. The Energy and Environmental Policy provides guidelines for development and enhancement of energy conservation and environmental programs within County departments. The policy includes four program areas in order to promote "green" design

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and operation of County facilities and reduces the County's "environmental footprint." A brief description of each program area is provided as follows:

### Energy and Water Efficiency

The program seeks to reduce the County's consumption of energy (electricity and natural gas) and water to achieve the goal of reducing energy consumption in County facilities by 20 percent by the year 2015. Initiatives to reduce energy and water consumption include:

- Implementing and monitoring energy and water conservation practices;
- Implementing energy and water efficiency projects; and
- Enhancing employee energy and water conservation awareness through education and promotions

### Environmental Stewardship

The County shall measure and reduce its "environmental footprint". An organization's environmental footprint is determined by the quantifiable impact of operations in terms of resource consumption, waster generation, and generation of pollutants. The program includes:

- Investigate requirements and preferences for environmentally friendly packaging, greater emphasis on recycled products, minimum energy efficiency standards for appliances, etc.;
- Place emphasis on recycling and landfill volume reduction within County buildings;
- Investigate the use of environmentally friendly products; and
- Support environmental initiatives through investigation of existing resources.

### Public Outreach and Education

The program will utilize County communications and outreach channels to share utility industry information, facilitate implementation of assistance programs, and spread information and education on energy conservation practices through the region. The program includes:

- Dissemination of energy related information including energy and water conservation practices, utility rates and rate changes, rotating power outage information, emergency power outage information, energy efficiency incentives; and
- Seek collaboration with local governments, public agencies, and County affiliates to strengthen regional, centralized energy and environmental management resources, and develop opportunities for information and cost sharing in energy management and environmental activities.

### Sustainable Design

The Sustainable Design Program seeks to optimize the performance and extend the useful life of the County's buildings through the integration of sustainable "green" features into the design of the County's capital improvement and refurbishment projects. Program features include:

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

- Enhance building sustainability through the integration of green, sustainable principles into the planning, design, and construction of County capital projects, which:
- Complement the functional objectives of the project;
- Extend the life cycle/useful life of buildings and sites;
- Optimize energy and water use efficiency;
- Improve indoor environmental quality and provide healthy work environments;
- Reduce ongoing building maintenance requirements; and
- Encourage use and reuse of environmentally friendly materials and resources;
- Establish a management approach that instills and reinforces the integration of sustainable design principles into the core competency skill set of the County's planners, architects, engineers, and project managers;
- Establish practical performance measures to determine the level of sustainability achieved relative to the objectives targeted for the individual project and overall capital program.

Since the adoption of the Policy, the County has taken steps to ensure compliance with the goals of the Policy and improve air quality, combat global warming, and improve the conditions of the County's environment.

**VIII. HAZARDS AND HAZARDOUS MATERIALS** - Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed project will involve removal of 1790 cubic yards of excavated material contaminated with lead, barium, cadmium, chromium or copper between Station 17+90 to 23+20 for transport to a Class 1 hazardous waste disposal facility as discussed in Appendix D. This excavated material is considered to be California Non Resource Conservation and Recovery Act (RCRA) hazardous waste. However, the soils are not considered to be federal RCRA hazardous waste as the contamination level in the soils is below the federal RCRA thresholds. In addition, 130 cubic yards of excavated materials contaminated with oil and grease will be removed between Stations 26+40 to 26+90 for treatment at an agency approved treatment and recycling facility. Appendix D presents additional information on this matter. Establishment of Special Excavation Criteria Areas for contaminated materials handling and disposal protocols and worker safety will be required. The project specifications would require the contractor to control dust by appropriate means such as BMP WM-3, Stockpile Management, BMP WE-1 Wind Erosion Control, and BMP TC-1 Stabilized Construction Entrance/Exit. The specifications will also require the contaminated soil to be excavated and disposed of in accordance with BMP WM-7, Contaminated Soil Management (see Appendix B). The contractor will be required to ensure that all applicable laws in accordance with local, state and federal regulations are in compliance. Therefore the project impact on the public or environment through the routine transport, use, or disposal of hazardous materials is considered to be less than significant.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

Combustion engine fluids from the construction equipment and contaminated soils are potentially hazardous substances. Necessary precautions will be taken to prevent the spillage of any hazardous substances that may affect the public or the environment at the project site. The project specifications would require the contractor to properly maintain all equipment and to transport contaminated soil under uniform hazardous waste manifest during construction. In the event of any spills of fluids, the contractor is required to remediate according to all applicable laws regarding chemical cleanup. With the establishment of Special Excavation Criteria Areas for contaminated materials, handling and disposal protocols, and employment of the BMP's, and observance of state laws regarding disposition of the contaminated excavated materials discussed in Item VIII a) above, there will also be a less than significant impact to the public or the environment.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The disposition of the contaminated materials in the proposed project, with the establishment of Special Excavation Criteria Areas for contaminated materials, handling and disposal protocols, and employment of the BMP's, and observance of state laws regarding disposition of the contaminated excavated material is discussed in Item VIII a) above will have a less than significant effect on hazardous emissions. The contaminated excavated materials are considered to be RCRA hazardous waste and are not acutely hazardous materials, substances or waste. Furthermore, the closest school, the Coeur d'Alene Elementary School, is greater than one-quarter mile north of the project site. Therefore, there will be a less than significant impact.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code, Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?

The proposed project would not take place on a site, which is known to be included on a list of hazardous materials sites compiled pursuant to Government Code, Section 65962.5. The old Venice dump lays under fill below the road excavation design depth within the project limits. The Venice dump is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The old Venice dump is designated as CERCLIS- No Further Remedial Action Planned (NFRAP). A preliminary assessment of the site was done in 1984 and, based on the available information, it was determined that no further action was required (LADPW 2010). The road reconstruction project involves removal of the existing pavement and road base to a depth of 28 inches with subsequent placement of Geogrid, road base, and pavement. The impact of constructing on a CERCLIS-NFRAP site would be less than significant.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The closest airport is the Santa Monica Municipal Airport located 1.8 miles north of the project site. The Los Angeles International Airport (LAX) is located 3 miles southeast of the project site. Safety hazards at airports are generally related with aircraft accidents, especially during takeoff or landing. Airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards, and tall structures that can interfere with aircraft operations. The proposed project would not construct any tall buildings or structures that would interfere with local airport operations, resulting in a safety hazard. The proposed project involves reconstruction of the existing road. The proposed project would not result in any impacts related to airport safety hazards.

- |   | Potential Significant Impact | Less than Significant Impact With Mitigation | Less Than Significant Impact        | No Impact                           |
|---|------------------------------|--|-------------------------------------|-------------------------------------|
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?<br><br>The proposed project is not located within the vicinity of a private airstrip. In addition, the closest airport is the Santa Monica Municipal Airport located 1.8 miles north of the project site. Thus, the proposed project will have no impact relating to airstrip safety for people residing or working in the project area.  | <input type="checkbox"/>     | <input type="checkbox"/>                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?<br><br>The proposed road reconstruction project would not interfere with a current emergency response plan or an emergency evacuation plan for local, state, or federal agencies. The project specifications will require at least one through traffic lane to remain open at all times during construction with notification to given to emergency service providers within the area. Construction and operational activities would follow CalOSHA and OSHA requirements. Access to all local roads would be maintained during construction. Notification to, and coordination with, the local police and fire departments will be implemented before and during the construction work. Consequently, the project construction would have a less than significant impact on emergency response and evacuation plans. | <input type="checkbox"/>     | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?<br><br>The proposed road reconstruction project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The project site is in a developed area with no flammable brush wildlands located in the vicinity and is not expected to increase any wildfire risk. Thus, no impact is expected.   | <input type="checkbox"/>     | <input type="checkbox"/>                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**IX. HYDROLOGY AND WATER QUALITY - Would the project:**

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements?<br><br>Construction activities including excavation of the existing pavement and base material with subsequent placement of Geogrid, base, and pavement. The contractor is required to implement BMP's as required by the National Pollutant Discharge Elimination System (NPDES) permit issued to the County by the Regional Water Quality Control Board (RWQCB) to minimize construction impacts on water quality. Some BMP's may include proper stockpiling and disposal of debris material and soil; protecting existing storm drain inlets; stabilizing disturbed areas; erosion control; proper management of construction materials; waste management; and sediment control. Therefore, complying with the recommended BMP's, the project will have a less than significant effect on the water quality standards or waste discharge requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?<br><br>The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

	Potential Significant Impact	Less than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
lowering of the local groundwater table level, since the project would not involve the use of any substantial amounts of water. Thus, impacts to groundwater supplies or groundwater recharge are expected to be less than significant. .				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The proposed project would not result in changes to existing drainage patterns of the project site because the topography of the existing road would be maintained. Thus less than significant erosion or siltation impacts are expected to occur and impacts on the rate or amount of surface runoff will be less than significant.				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The proposed project would not change the permeability factors of the road surface and topography of the existing road. The project would not alter the existing drainage pattern or increase the rate of runoff in a manner, which would result in flooding on-or off-site on any property. Therefore, impacts will be less than significant.				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The proposed project construction would not result in substantial additional surface water runoff during storms since there would be no significant change to the permeability's of the existing surfaces or the topography of the road. Construction is expected to be scheduled during dry periods. Therefore, the impact of the proposed project on existing or planned stormwater drainage systems is considered less than significant				
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The contractor will be required to adhere to all applicable BMP's to minimize any degradation to water quality during construction. Thus, the proposed project will have a less than significant impact on water quality.				
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Existing flood hazards are established by the Federal Emergency Management Agency. According to the Federal Emergency Management Agency's Flood Insurance Rate Map Community-Panel No. 06037C1752F <sup>1</sup> , the proposed project site is located in Flood Hazard Zone "X." A Flood Hazard Zone "X" is defined by Federal Emergency Management Agency as an area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. Implementation of the proposed project will not place housing within a 100-year flood hazard area. The proposed project does not affect the existing flood map. Therefore there would be no impact.				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>1</sup> Community-Panel Number 06037C1752F dated 09/26/2008

	Potential Significant Impact	Less than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
The proposed road reconstruction project will not place any structures within a 100-year flood hazard area that impede or redirect flood flows.				
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed road reconstruction project would not include activities that could expose people or structures to a significant risk of loss, injury, or death involving flooding.				
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project would not include activities that could expose people or structures to inundation by seiche, tsunami, or mudflow.				

**X. LAND USE AND PLANNING - Would the project:**

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project involves reconstruction of the existing road way. Two lanes of traffic would be kept open during construction. The project would not physically divide an established community. Therefore, there will be no impact.				
b) Conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The proposed project involves reconstruction of the existing pavement and base in a manner that maintains the current road grade and alignment. The project would not conflict with the General Plan of the County of Los Angeles, the Conservation and Management Plan for Marina del Rey, or the Local Coast Program, or any other applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There will be a less than significant impact.				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project construction and tree removal work will be implemented in accordance guidelines and requirements of the Conservation and Management Plan for Marina del Rey. All necessary notifications, preconstruction bird surveys, and tree replanting work, and post planting monitoring reports will be performed. Thus, the proposed project will have a less than significant impact with regards to conflicts with any applicable habitat conservation plan or natural community conservation plan.				

**XI. MINERAL RESOURCES - Would the project**

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project would be limited to the reconstruction of the existing roadway pavement and base. The work would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state.				
b) Result in the loss of availability of a locally-important mineral resource recovery site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

delineated on a local general plan, specific plan, or other land use plan?

The proposed project would be limited to the reconstruction of the existing roadway pavement and base. The work would not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. There would be no impact.

**XII. NOISE** - Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Operational Noise

There will be no change in the operational noise of the project after construction is completed with respect to existing noise levels. The project will not generate any new traffic.

The County of Los Angeles General Plan has adopted the State of California Land Use Compatibility for Community Noise Environments Matrix for noise compatibility standards. These standards are presented in a Community Noise Equivalent Level (CNEL), which is a weighted 24 hour average noise level.

The matrix presents exterior noise level standards for a variety of land uses that would be applicable to operational noise impacts. Noise level limits for residential and commercial properties are 45 dBA CNEL between the hours of 10 p.m. to 7 a.m., and 50 dBA CNEL between the hours of 7 a.m. to 10 p.m.

Construction Noise

County of Los Angeles Ordinance 12.12.030 prohibits construction activities on Sundays, or at any other time between the hours of 8:00 p.m. and 6:30 a.m., the following day. More specifically, the ordinance states that no person shall perform any construction or repair work of any kind upon any building or structure, or perform any earth excavating, filling or moving, where any of the foregoing entails the use of any air compressors; jackhammers; power-driven drill; riveting machine; excavator, diesel-powered truck, tractor or other earth moving equipment; hand hammers on steel or iron, or any other machine, tool, device or equipment, which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobile home, or other place of residence. (Ord. 9818 § 1, 1969: Ord. 8594 § 6, 1964.)

Paragraph B of Ordinance 12.08.440 states that the contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule shown in Table 5.

Potential  
Significant Impact

Less than  
Significant Impact  
With Mitigation

Less Than  
Significant Impact

No Impact

**Table 5: Construction Noise Level Limits,  
Los Angeles Noise Ordinance 12.08.440**

	Single Family Residential	Multi-family Residential	Semi residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75dBA	80dBA	85dBA
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60dBA	64dBA	70dBA

Ordinance 12.08.440 also requires all mobile or stationary internal-combustion-engine powered equipment or machinery be equipped with suitable exhaust and air-intake silencers in proper working order.

In summary, the proposed project could be subject to County of Los Angeles Ordinance 12.12.030, which prohibits construction activities on Sundays, or at any other time between the hours of 8:00 p.m. and 6:30 a.m., the following day; and Ordinance 12.08.440, which sets maximum noise level limits for single-family, multi-family, semi-residential/commercial land uses. The project would be prohibited from causing noise levels to reach maximum noise levels as shown in Table 5. Table 6 lists typical construction equipment noise levels for equipment that would be used during construction of the proposed project.

Table 6: Noise Associated with Typical Construction Equipment

Equipment Description	Maximum Noise levels measured (dBA at 50 feet)
Compactor Roller	80
Dozer	85
Dump Trucks	84
Front End Loader	80
Generator (more than 25 Kilo Volt Amperes (KVA))	82
Grader	85
Source: Thalheimer	

However, the construction noise levels of the proposed project are exempt from the noise limits of the County Noise Control Ordinance as specified in the County Noise Control Ordinance Part 5 Exemptions, H: 5

Public Health and Safety Activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public right of way, and those situations, which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

health and well-being, including but not limited to street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catch basins, removal of damaged poles and vehicles, repair of water hydrants and mains, gas lines, oil lines, sewers, etc.

Therefore, the proposed project would be expected to result in less than significant construction noise impacts in relation to exposure or generation of noise levels in excess of established standards.

- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction of the project could cause minimal, temporary ground vibration during construction. However, the project specifications would require the contractor to comply with all noise laws and ordinances.

Table 7 shows the peak particle velocities of some common construction equipment. None of the construction equipment used for the project will cause excessive groundborne vibration.

**Table 7: Typical Construction Equipment Vibration Emissions<sup>1</sup>**

Equipment	Peak Partial Velocity in Inches per second		
	At 25 ft.	At 50 ft.	At 100 ft.
Large Bulldozer	0.089	0.063	0.045
Loaded Trucks	0.076	0.054	0.038
Jackhammer	0.035	0.025	0.018
Small Bulldozer	0.003	0.002	0.002
Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment, 2006 Bold values are considered annoying to people			

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

**Table 8: Human Reaction to Typical Vibration**

Levels1 Vibration Level Peak Particle Velocity in inches/second	Human Reaction
0.0059-0.0188	Threshold of perception, possibly of intrusion
0.0787	Vibrations readily perceptible
0.0984	Continuous vibration begins to annoy people
0.1968	Vibrations annoying to people in buildings
0.3937-0.5905	Vibrations considered unpleasant when continuously subjected and unacceptable by some walking on bridges.
Source: California Department of Transportation: Traffic Noise Analysis Protocol for New Highway and Reconstruction Projects, 1992	

As stated above, the project site is surrounded by multi-residential and commercial land uses. Groundborne vibration and noise may be noticeable at sensitive receptors within 100 feet of construction activities and annoying to receptors located less than 100 feet from the construction activities.

Therefore, the project impacts would be considered less than significant, since construction would be for a short period and would not expose people to severe noise levels or excessive groundborne vibration.

- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed project would not result in an increase in ambient noise levels in the project vicinity above levels existing without the project following construction. The proposed reconstruction of the roadway pavement would result in short-term increases in noise levels during the construction period but would not result in any change in existing noise levels once the construction is complete. It is noted that the undulations in the pavement surface caused by the road settling will be eliminated by the construction. Hence, the project once constructed will reduce traffic noise. Therefore, there would be a less than significant impact on increases in ambient noise levels in the project vicinity.

- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed project is expected to result in less than significant impacts to noise in relation to temporary or periodic increases in ambient noise levels. During the construction phase of the project, temporary noise would be generated. Construction

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

activities will be limited to normal County regulated hours. It is noted that the cracking, unevenness, and settlement in the pavement surface will be mitigated by the reconstructed roadway surface resulting from this project. Hence, the project once constructed will reduce traffic noise. However, as discussed previously, the temporary or periodic increases in noise levels would be exempt from the noise restriction of the County Noise Control Ordinance. Therefore, the proposed project is expected to result in less than significant impacts to noise related to temporary or periodic increases in ambient noise levels.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project site is located approximately 2.7 miles north of Los Angeles International Airport and approximately 1.6 miles south of the Santa Monica Municipal Airport. The proposed road reconstruction project will not change the grade but will improve the wearing surface of the existing road and will not result in the exposure of people residing or working in the area to excessive noise levels. There will be a less than significant impact.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not located within the vicinity of a private airstrip and therefore will not expose people residing or working in the area to excessive noise levels. There will be no impact.

**XIII. POPULATION AND HOUSING - Would the project:**

- a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

The proposed project would not induce substantial population growth, either directly or indirectly as a result of the reconstruction of the roadway. No change in use is proposed. Therefore, no impacts are expected.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace existing housing or people because the work is limited to the reconstruction of the existing road. No housing construction, demolition, or change in use is proposed. There will be no impact.

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace any homes because it involves reconstruction of the existing road. Therefore, no impacts would occur.

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

**XIV PUBLIC SERVICES**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- i) Fire protection?

The proposed project would not result in the provision of or need for any new or physically altered fire protection facilities. There will be no impact.

- ii) Police protection?

The proposed project would not result in the provision of or need for any new or physically altered police protection. There will be no impact.

- iii) Schools?

The proposed project would not result in the provision of or need for any new or physically altered school facilities. There will be no impact.

- iv) Parks?

The proposed project would not result in the provision of or need for any new or physically altered park facilities. No construction or change in use is proposed. There will be no impact.

- v) Other public facilities?

The proposed project would not result in the provision of or need for any new or physically altered public facilities. There will be no impact.

**XV. RECREATION -**

- a) Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed road reconstruction project would not increase the use of existing parks or other recreational facilities. No construction or development is proposed. There will be no impact.

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project does not include recreational facilities or require the construction or expansion of any recreational facilities. There will be no impact.

Potential  
Significant Impact

Less than  
Significant Impact  
With Mitigation

Less Than  
Significant Impact

No Impact

**XVI TRANSPORTATION/TRAFFIC**

Marina del Rey's internal circulation system consists of two main components. First, two secondary highways - Admiralty Way on the east and north, and Via Marina on the west - serve as the main collector roads within the Marina. Second, a number of local streets provide access to the waterfront along local roads, including Fiji Way, Mindanao Way, and Bali Way on the east side, and Tahiti Way, Marquesas Way, Panay Way, and Palawan Way on the west side.

Outside the Marina, two state highways serve the area. They are the Marina Freeway/Expressway (Route 90) and Lincoln Boulevard (Route 1). The Route 90 Freeway and its extension to Lincoln Boulevard serve as the main access to the Marina from the east. Connections between Route 90 and the San Diego Freeway provide access to the westside and southbay. Mindanao Way is the only Marina street that connects directly with the Route 90 extension, but some Route 90 traffic uses Lincoln Boulevard to Bali Way as an alternate route to the Marina.

Lincoln Boulevard serves north and southbound traffic along the eastern boundary of the Marina and provides access to the Marina via three connecting local streets (Fiji Way, Mindanao Way, and Bali Way). Culver Boulevard and Jefferson Boulevard serve as the major east-west corridors linking the area to communities east of Lincoln, and south to Westchester.

Access to and from Venice is provided via Palawan Way and Via Marina connections to Washington Boulevard. Outlets to the Venice Silver Strand community are provided at Marquesas Way, Tahiti Way, Bora Bora Way, and the south exit of Via Marina.

Table 9 in Appendix E, shows the traffic counts on major streets in the vicinity of Oxford Basin.

- Would the project:

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The proposed project will require transportation of construction equipment and materials to the proposed project site. This could minimally increase the existing traffic. The project will not result in any permanent changes to the traffic circulation system. The proposed project does not conflict with any applicable plan, ordinance or policy established measures of effectiveness for the performance of the circulation system in this area.

The greatest amount of construction related traffic would occur during excavation and grading. These activities would require 48 haul truck trips per day for a period of 15 days. In addition, there may be as many as 20 workers traveling to the site in the morning and from it in the afternoon. An additional 94 vehicle trips per day would be about 0.17 percent of the annualized average daily trips on Lincoln Boulevard (Highway 1) between the 90 freeway and Washington Boulevard and about 0.32 percent of the annualized average daily trips on the 90 freeway between Lincoln Boulevard and Mindanao Way (Table 11). The haul trucks would make about 6 trips per hour during the

	Potential Significant Impact	Less than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
<p>15 days of excavation and grading. Six trips per hour would be about 0.4 per cent of the peak hour traffic on Admiralty Way between Palawan Way and Bali Way. A temporary increase in traffic of less than 0.5 percent would be a Less than Significant impact.</p>				
<p>b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</p> <p>The minor increase in traffic in the project area due to construction vehicles is temporary and only during construction. The project is not expected to generate vehicular traffic and would not cause an increase in traffic in the project area. As discussed under XVa, the proposed road reconstruction project would generate a relatively small amount of increased traffic during construction. When construction is completed the project would not result in any traffic increase over existing levels. Therefore the project would not generate traffic that would result in exceedance of a level of service standard on any designated road or highway. Impacts would be Less than Significant.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</p> <p>The proposed project to address the roadway settlement would not result in a change in air traffic patterns, which include increase to traffic levels or change in location. Therefore, there will be no impact that will result in safety risks.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p> <p>The proposed road reconstruction project will not change the existing vertical or horizontal alignment of the road. The proposed project would not substantially increase hazards due to a design feature or incompatible uses since it would not add any design features or incompatible uses. No construction or change in use is proposed. There would be no impact.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>e) Result in inadequate emergency access?</p> <p>The proposed project would not result in inadequate emergency access since no changes in emergency access would occur as a result of the project. Traffic control plans will be implemented during the construction project to ensure two lanes of traffic are flowing along the road in both directions. Notification and coordination with the local police and fire departments will be implemented before and during the construction work. There will be a less than significant impact.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</p> <p>The proposed project would reconstruct the existing pavement and base along 1,300 linear feet of Admiralty Way. The project does not conflict with any polices supporting alternative transportation of the Los Angeles County Congestion Management Program, the Marina del Rey Local Coastal Program, or the Marina del Rey Land Use Plan. The project would not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. There will be no impact.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

**XVII. UTILITIES AND SERVICE SYSTEMS** - Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- The proposed road reconstruction project will not generate wastewater. The project would not exceed wastewater treatment requirements as applicable to the Regional Water Quality Control Board. As such, no impacts to wastewater treatment would occur.
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- The proposed road reconstruction project would not generate wastewater. The project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities
- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- The proposed project would not necessitate or result in the construction of new stormwater drainage facilities or expansion of existing facilities. The proposed project would not increase any stormwater runoff that would affect existing or planned stormwater drainage systems.
- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- The proposed project would not necessitate any water supplies to serve the project from any existing entitlements and resources, nor necessitate any new or expanded entitlements. The contractor's average weekly water use will be significantly less than 1 percent of the Marina del Rey residential weekly water use. There will be a less than significant impact.
- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- The proposed project would not necessitate or result in any capacity determinations made by any wastewater treatment provider since the project would not increase any waste water discharges. There will be a less than significant impact.
- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- The proposed project would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs. The contractor may elect to take the excavated material to Atkinson Brick Company (an inert landfill) in the City of Los Angeles, which can either use the material for fill in their inert landfill or process it for reuse. There will be a less than significant impact.
- g) Comply with Federal, State, and local statutes and regulations related to solid waste?
- The proposed project would comply with Federal, State, and local statutes and regulations related to solid waste and in compliance would ensure there will be a less

Potential Significant Impact  
 Less than Significant Impact With Mitigation  
 Less Than Significant Impact  
 No Impact

than significant impact. As stated above, the contractor may elect to take the excavated material to Atkinson Brick Company for deposition in their inert landfill or for processing for reuse.

**XVIII MANDATORY FINDINGS OF SIGNIFICANCE**

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As discussed herein, with the employment of the biological mitigation measures, BIO-1 (pretree removal bird survey); BIO-2 (preconstruction bird survey); and BIO-3 (Temporary exclusion fencing); the proposed road reconstruction project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Additionally, the work will be performed within the existing road prism and will have a less than significant effect on any natural areas.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The proposed road reconstruction project should start in early 2013. Other planned projects in the near the project area include the Waterline Phase II project located in the Marina (which will finish in May 2012), the Admiralty Way Intersections project including the intersections at Palawan Way, Bali Way, and Mindanao Way (starting in early 2012), and the Admiralty Way Oxford Basin project starting in mid 2013. Each of the projects will have temporary increases in noise, traffic and air emissions during construction. If construction of the Admiralty Way Settlement Repair project occurs at the same time as one or more of these other nearby projects, the other projects would add to the temporary noise, traffic and air emissions of construction at the settlement repair project site. Because construction of the Admiralty Way Settlement project would occur over a seven month duration and because temporary construction impacts are less than significant. Potential cumulative impacts during construction would be less than significant.

- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed project would not result in substantial adverse effects on human beings, either directly or indirectly. There will be temporary increases in noise, air emissions, and traffic during the seven months of construction. Impacts would be less than significant. When the project is completed the settlement, cracking, and unevenness of the road will be eliminated by the reconstructed roadway surface. The reconstructed pavement will be smooth and uniform resulting in reduced traffic noise and less wear on vehicles using the road. There will be a less than significant impact.

# APPENDIX A

TREE PLANTING LOCATIONS IN BURKE PARK

# ADMIRALTY WAY SETTLEMENT REPAIR PROJECT

## TREE PLACEMENT FOR MITIGATION WITHIN BURKE PARK



*Jacaranda mimosifolia*  
Jacaranda



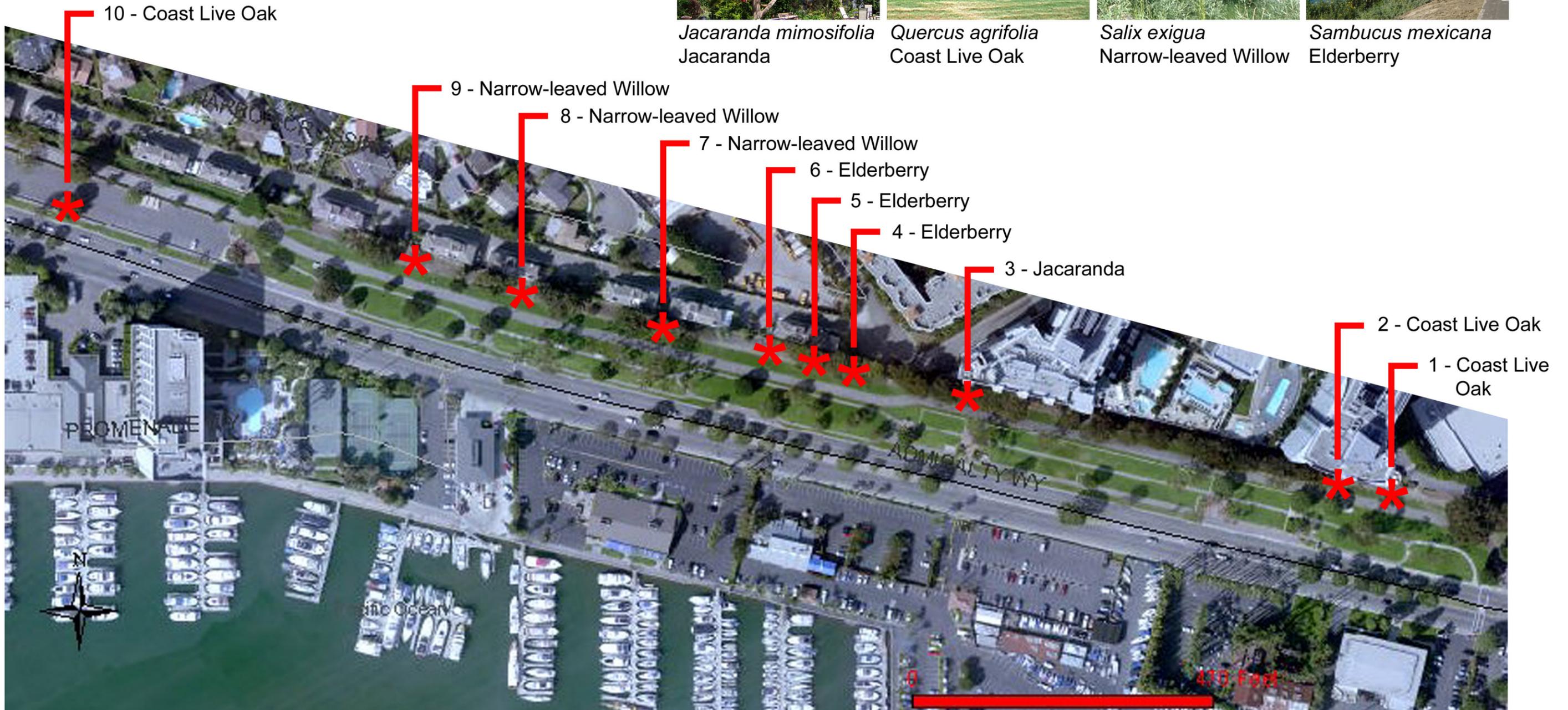
*Quercus agrifolia*  
Coast Live Oak



*Salix exigua*  
Narrow-leaved Willow

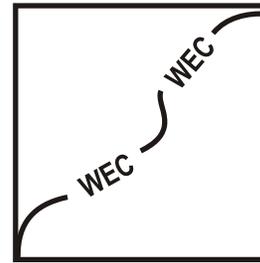
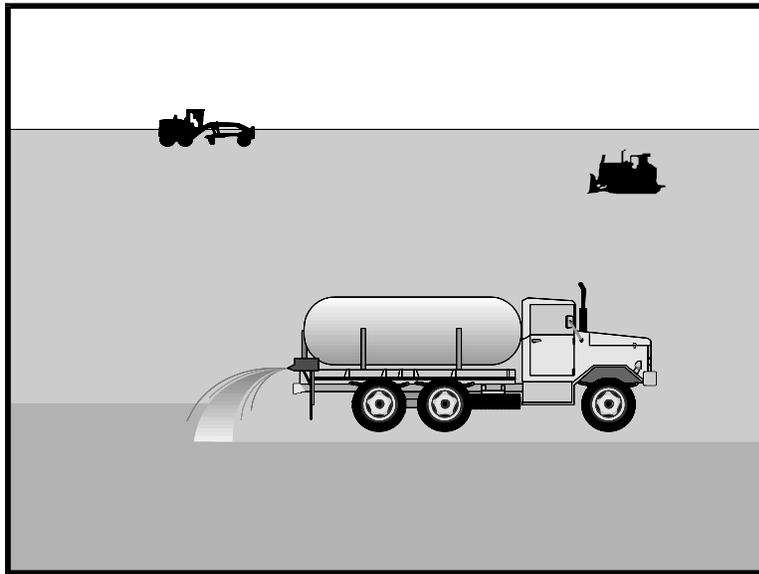


*Sambucus mexicana*  
Elderberry



# APPENDIX B

BEST MANAGEMENT PRACTICES



Standard Symbol

- BMP Objectives**

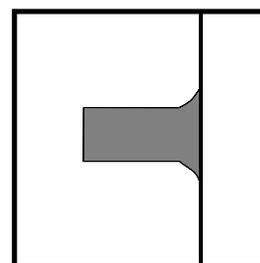
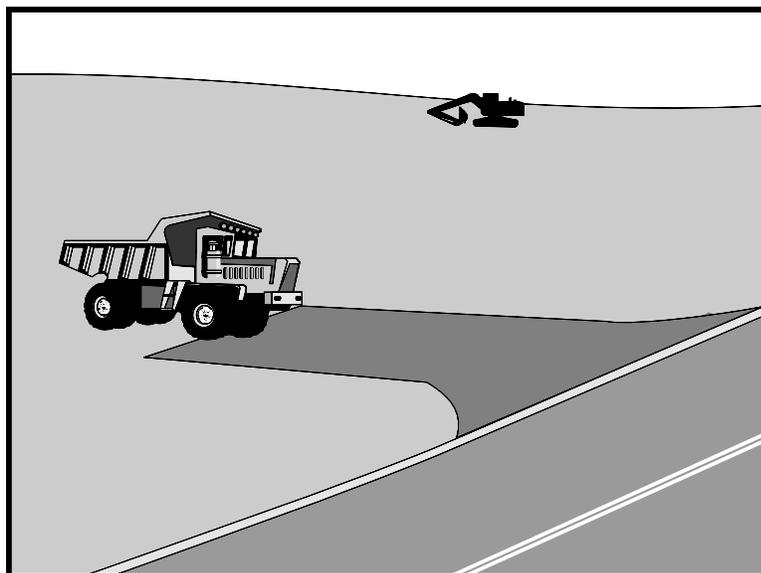
  - Soil Stabilization
  - Sediment Control
  - Tracking Control
  - Wind Erosion Control
  - Non-Storm Water Management
  - Materials and Waste Management

**Definition and Purpose** Wind erosion control consists of applying water and/or other dust palliatives as necessary to prevent or alleviate erosion by the forces of wind. Covering of small stockpiles or areas is an alternative to applying water or other dust palliatives.

- Appropriate Applications**
- This practice is implemented on all exposed soils subject to wind erosion.
- Limitations**
- Effectiveness depends on soil, temperature, humidity and wind velocity.

- Standards and Specifications**
- Water shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.
  - All distribution equipment shall be equipped with a positive means of shutoff.
  - Unless water is applied by means of pipelines, at least one mobile unit shall be available at all times to apply water or dust palliative to the project.
  - If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non-potable supplies. Non-potable tanks, pipes and other conveyances shall be marked “NON-POTABLE WATER - DO NOT DRINK.”
  - Materials applied as temporary soil stabilizers and soil binders will also provide wind erosion control benefits.

- Maintenance and Inspection**
- Check areas that have been protected to ensure coverage.



Standard Symbol

- BMP Objectives**

  - Soil Stabilization
  - Sediment Control
  - Tracking Control
  - Wind Erosion Control
  - Non-Storm Water Management
  - Materials and Waste Management

**Definition and Purpose**

A stabilized construction access is defined by a point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

**Appropriate Applications**

- Use at construction sites:
  - Where dirt or mud can be tracked onto public roads.
  - Adjacent to water bodies.
  - Where poor soils are encountered.
  - Where dust is a problem during dry weather conditions.
- This BMP may be implemented on a project-by-project basis in addition to other BMPs when determined necessary and feasible by the Contractor or Engineer.

**Limitations**

- Site conditions will dictate design and need.

**Standards and Specifications**

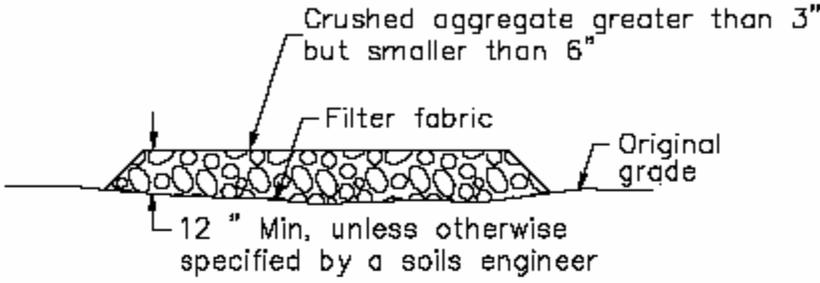
- Limit the points of entrance/exit to the construction site.
- Limit speed of vehicles to control dust.
- Properly grade each construction entrance/exit to prevent runoff from leaving the construction site.
- Route runoff from stabilized entrances/exits through a sediment-trapping device before discharge.
- Design stabilized entrance/exit to support the heaviest vehicles and equipment that will use it.

- Select construction access stabilization (aggregate, asphaltic concrete, concrete) based on longevity, required performance, and site conditions. The use of asphalt concrete (AC) grindings for stabilized construction access/roadway is not allowed.
- Use of constructed/manufactured steel plates with ribs for entrance/exit access is allowed with written approval from the Engineer.
- If aggregate is selected, place crushed aggregate over geotextile fabric to at least 12 in. depth, or place aggregate to a depth recommended by the Engineer. Crushed aggregate greater than 3 inches and smaller than 6 inches shall be used.
- Designate combination or single purpose entrances and exits to the construction site.
- Implement BMP SC-7, “Street Sweeping and Vacuuming” as needed and as required.
- Require all employees, subcontractors, and suppliers to utilize the stabilized construction access.
- All exit locations intended to be used continuously and for a period of time shall have stabilized construction entrance/exit BMPs (TC-1 “Stabilized Construction Entrance/Exit” or TC-3 “Entrance/Outlet Tire Wash”).

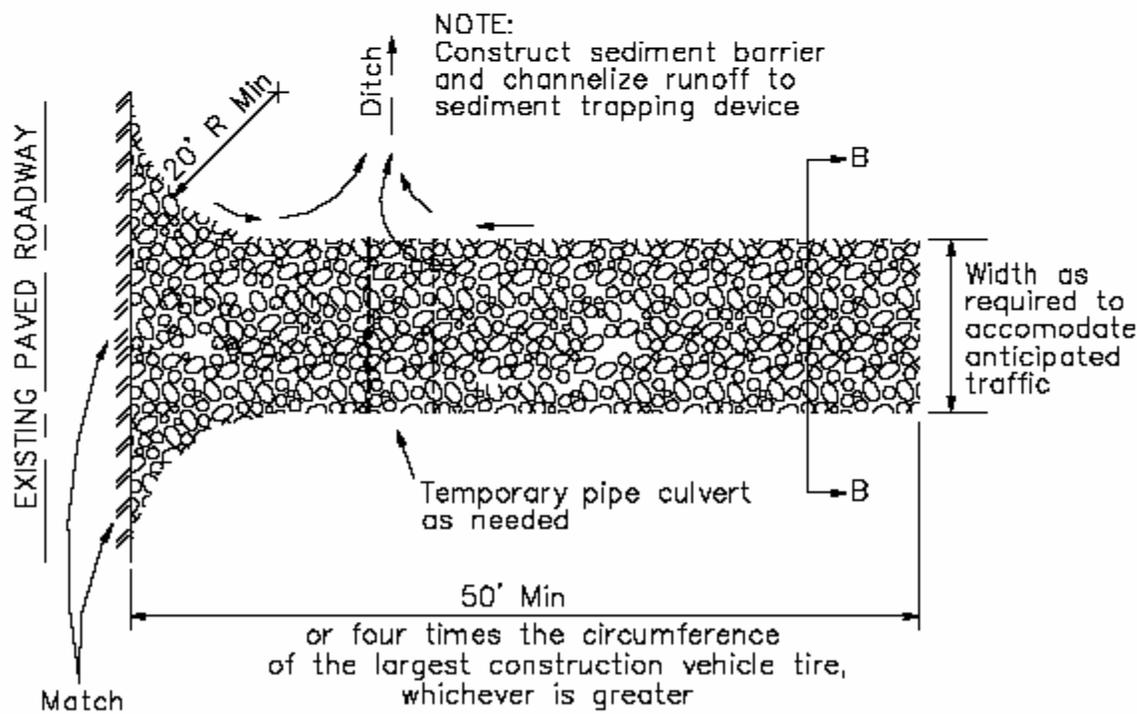
## Maintenance and Inspection

- Inspect routinely for damage and assess effectiveness of the BMP. Remove aggregate, separate and dispose of sediment if construction entrance/exit is clogged with sediment or as directed by the Engineer.
- Keep all temporary roadway ditches clear.
- Inspect for damage and repair as needed.





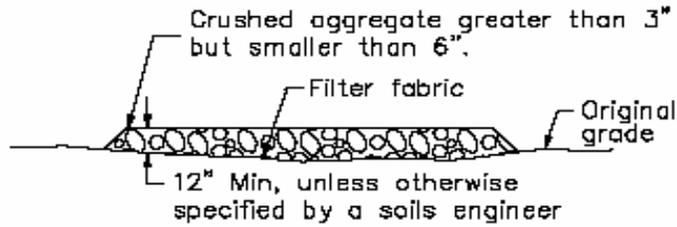
SECTION B-B  
NTS



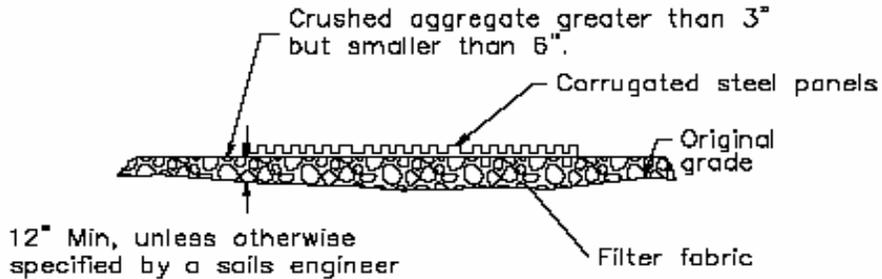
PLAN  
NTS

Stabilized Construction Entrance/Exit (Type 1)



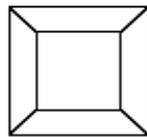


**SECTION B-B**  
NTS

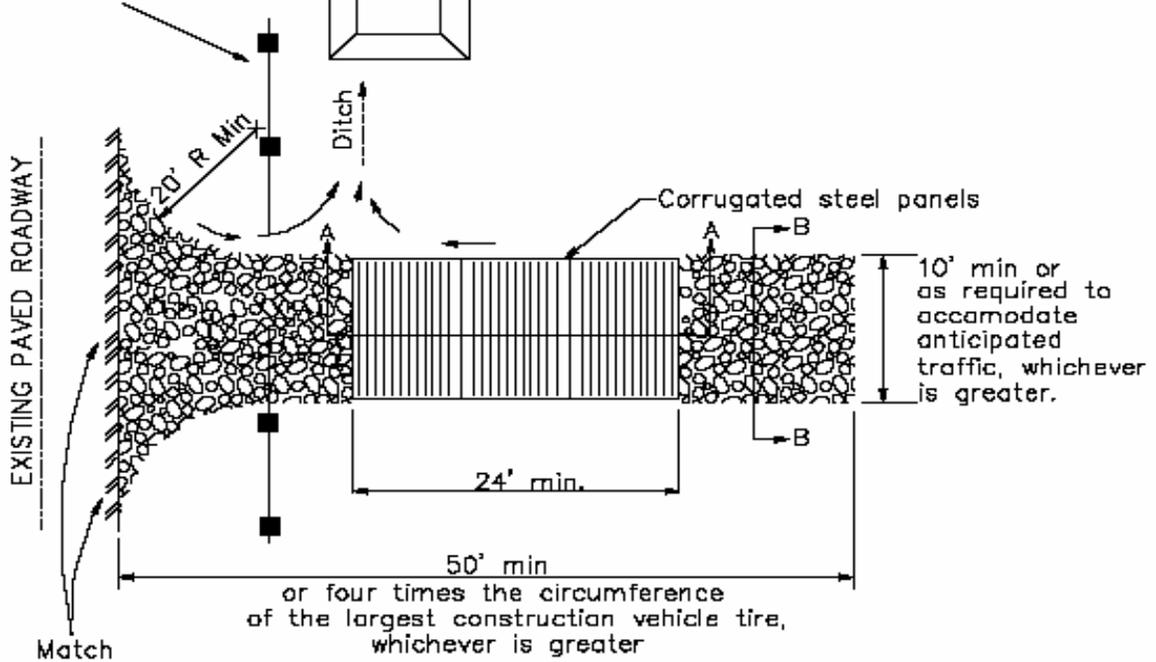


**SECTION A-A**  
NOT TO SCALE

NOTE:  
Construct sediment barrier and channelize runoff to sediment trapping device

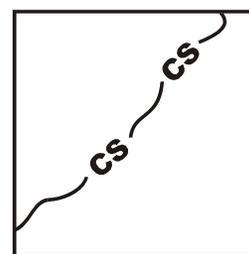


Sediment trapping device



**PLAN**  
NTS

Stabilized Construction Entrance/Exit (Type 2)



Standard Symbol

- BMP Objectives**

  - Soil Stabilization
  - Sediment Control
  - Tracking Control
  - Wind Erosion Control
  - Non-Storm Water Management
  - Materials and Waste Management

**Definition and Purpose** Stockpile management procedures and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, and paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate subbase or pre-mixed aggregate, asphalt binder (so called “cold mix” asphalt) and pressure treated wood.

**Appropriate Applications** Implemented in all projects that stockpile soil and other materials.

**Limitations** ■ None identified

- Standards and Specifications**
- Protection of stockpiles is a year-round requirement.
  - Locate stockpiles a minimum of 50 ft away from concentrated flows of storm water, drainage courses, and inlets.
  - Implement wind erosion control practices as appropriate on all stockpiled material. For specific information see BMP WE-1, “Wind Erosion Control.”
  - Stockpiles of contaminated soil shall be managed in accordance with BMP WM-7, “Contaminated Soil Management.”
  - Bagged materials should be placed on pallets and under cover.

***Protection of Non-Active Stockpiles***

Non-active stockpiles of the identified materials shall be protected further as follows:

- ***Soil stockpiles:***

- During the rainy seasons, soil stockpiles shall be covered or protected with soil stabilization measures and a temporary perimeter sediment barrier at all times.
- During the non-rainy season, soil stockpiles shall be covered and protected with a temporary perimeter sediment barrier prior to the onset of precipitation.

- ***Stockpiles of portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate subbase:***

- During the rainy season, the stockpiles shall be covered or protected with a temporary perimeter sediment barrier at all times.
- During the non-rainy season, the stockpiles shall be covered or protected with a temporary perimeter sediment barrier prior to the onset of precipitation.

- ***Stockpiles of “cold mix”:***

- During the rainy season, cold mix stockpiles shall be placed on and covered with plastic or comparable material at all times.
- During the non-rainy season, cold mix stockpiles shall be placed on and covered with plastic or comparable material prior to the onset of precipitation.

- ***Stockpiles/Storage of pressure treated wood with copper, chromium, and arsenic or ammonical, copper, zinc, and arsenate:***

- During the rainy season, treated wood shall be covered with plastic or comparable material at all times.
- During the non-rainy season, treated wood shall be covered with plastic or comparable material and shall be placed on pallets prior to the onset of precipitation.

### ***Protection of Active Stockpiles***

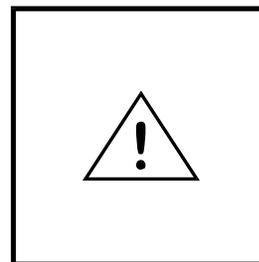
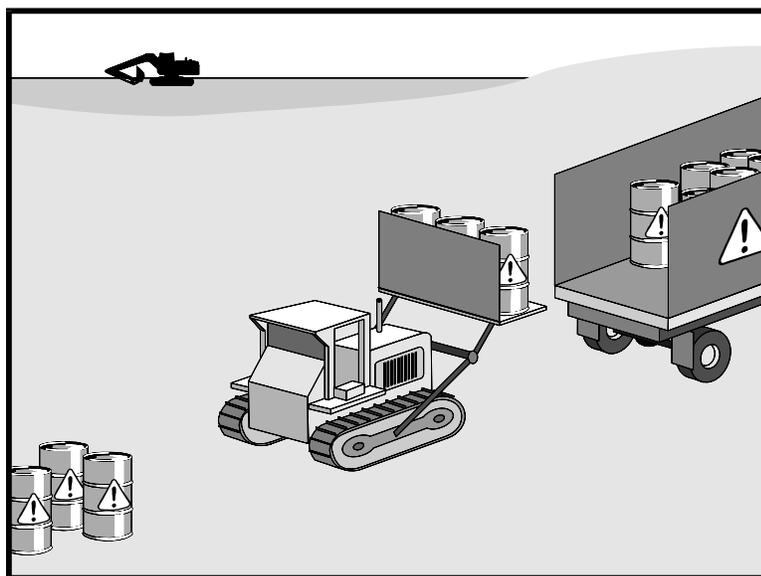
Active stockpiles of the identified materials shall be protected further as follows:

- All stockpiles shall be covered, stabilized, or protected with a temporary linear sediment barrier prior to the onset of precipitation.
- Stockpiles of “cold mix” shall be placed on and covered with plastic or comparable material prior to the onset of precipitation.

## Maintenance and Inspections

- Repair and/or replace perimeter controls and covers as needed, or as directed by the Engineer, to keep them functioning properly. Sediment shall be removed when sediment accumulation reaches one-third ( $1/3$ ) of the barrier height.





Standard Symbol

### BMP Objectives

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

### Definition and Purpose

These are procedures and practices to minimize or eliminate the discharge of pollutants from construction site hazardous waste to the storm drain systems or to watercourses.

### Appropriate Applications

- This best management practice (BMP) applies to all construction projects.
- Hazardous waste management practices are implemented on construction projects that generate waste from the use of:
  - Petroleum Products,
  - Asphalt Products,
  - Concrete Curing Compounds,
  - Pesticides,
  - Acids,
  - Paints,
  - Stains,
  - Solvents,
  - Wood Preservatives,
  - Roofing Tar, or
  - Any materials deemed a hazardous waste in California, Title 22 Division 4.5, or listed in 40 CFR Parts 110, 117, 261, or 302.

- Limitations**
- Nothing in this BMP relieves the Contractor from responsibility for compliance with federal, state, and local laws regarding storage, handling, transportation, and disposal of hazardous wastes.
  - This BMP does not cover aerially deposited lead (ADL) soils. For ADL soils refer to BMP WM-7, “Contaminated Soil Management,” and the project special provisions.

## Standards and Specifications

### ***Education***

- Educate employees and subcontractors on hazardous waste storage and disposal procedures.
- Educate employees and subcontractors on potential dangers to humans and the environment from hazardous wastes.
- Instruct employees and subcontractors on safety procedures for common construction site hazardous wastes.
- Instruct employees and subcontractors in identification of hazardous and solid waste.
- Hold regular meetings to discuss and reinforce hazardous waste management procedures (incorporate into regular safety meetings).
- The Contractor’s Water Pollution Control Manager (WPCM) shall oversee and enforce proper hazardous waste management procedures and practices.
- Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.

### ***Storage Procedures***

- Wastes shall be stored in sealed containers constructed of a suitable material and shall be labeled as required by Title 22 CCR, Division 4.5 and 49 CFR Parts 172,173, 178, and 179.
- All hazardous waste shall be stored, transported, and disposed as required in Title 22 CCR, Division 4.5 and 49 CFR 261-263.
- Waste containers shall be stored in temporary containment facilities that shall comply with the following requirements:
  - Temporary containment facility shall provide for a spill containment volume able to contain precipitation from a 24-hour, 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest tank within its boundary, whichever is greater.



- Temporary containment facility shall be impervious to the materials stored there for a minimum contact time of 72 hours.
  - Temporary containment facilities shall be maintained free of accumulated rainwater and spills. In the event of spills or leaks accumulated rainwater and spills shall be placed into drums after each rainfall. These liquids shall be handled as a hazardous waste unless testing determines them to be non-hazardous. Non-hazardous liquids shall be sent to an approved disposal site.
  - Sufficient separation shall be provided between stored containers to allow for spill cleanup and emergency response access.
  - Incompatible materials, such as chlorine and ammonia, shall not be stored in the same temporary containment facility.
  - Throughout the rainy season, temporary containment facilities shall be covered during non-working days, and prior to rain events. Covered facilities may include use of plastic tarps for small facilities or constructed roofs with overhangs. A storage facility having a solid cover and sides is preferred to a temporary tarp. Storage facilities shall be equipped with adequate ventilation.
- Drums shall not be overfilled and wastes shall not be mixed.
  - Unless watertight, containers of dry waste shall be stored on pallets.
  - Paint brushes and equipment for water and oil based paints shall be cleaned within a contained area and shall not be allowed to contaminate site soils, watercourses or drainage systems. Waste paints, thinners, solvents, residues, and sludges that cannot be recycled or reused shall be disposed of as hazardous waste. When thoroughly dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths shall be disposed of as solid waste.
  - Ensure that adequate hazardous waste storage volume is available.
  - Ensure that hazardous waste collection containers are conveniently located.
  - Designate hazardous waste storage areas on site away from storm drains or watercourses and away from moving vehicles and equipment to prevent accidental spills.
  - Minimize production or generation of hazardous materials and hazardous waste on the job site.
  - Use containment berms in fueling and maintenance areas and where the potential for spills is high.

- Segregate potentially hazardous waste from non-hazardous construction site debris.
- Keep liquid or semi-liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.
- Clearly label all hazardous waste containers with the waste being stored and the date of accumulation.
- Place hazardous waste containers in secondary containment.
- Do not allow potentially hazardous waste materials to accumulate on the ground.
- Do not mix wastes.

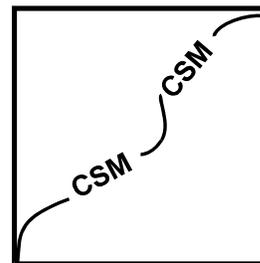
### ***Disposal Procedures***

- Waste shall be disposed of within 90 days of being generated, or as directed by the Engineer. In no case shall hazardous waste storage exceed requirements in Title 22 CCR, Section 66262.34.
- Waste shall be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms.
- A Department of Health Services (DHS) certified laboratory shall sample waste and classify it to determine the appropriate disposal facility.
- Make sure that toxic liquid wastes (e.g., used oils, solvents, and paints) and chemicals (e.g., acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for solid waste construction debris.
- Properly dispose of rainwater in secondary containment that may have mixed with hazardous waste.
- Recycle any useful material such as used oil or water-based paint when practical.

## Maintenance and Inspection

- A foreman and/or construction supervisor shall monitor on-site hazardous waste storage and disposal procedures.
- Waste storage areas shall be kept clean, well organized, and equipped with ample clean-up supplies as appropriate for the materials being stored.
- Storage areas shall be inspected in conformance with the contract special provisions and the SWPPP.
- Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function.
- Hazardous spills shall be cleaned up and reported in conformance with the applicable Material Safety Data Sheet (MSDS) and the instructions posted at the project site.
- The National Response Center, at (800) 424-8802, shall be notified of spills of Federal reportable quantities in conformance with the requirements in 40 CFR parts 110, 117, and 302. See BMP WM-04 Spill Prevention and Control for other emergency numbers in case of spills.
- Copies of completed hazardous waste manifest forms shall be provided to the Engineer.





Standard Symbol

- BMP Objectives**
- Soil Stabilization
  - Sediment Control
  - Tracking Control
  - Wind Erosion Control
  - Non-Storm Water Management
  - Materials and Waste Management

**Definition and Purpose** These are procedures and practices to minimize or eliminate the discharges of pollutants to the drainage system or to watercourses from contaminated soil.

- Appropriate Applications**
- Contaminated soil management is implemented on construction projects in highly urbanized or industrial areas where soil contamination may have occurred due to spills, illicit discharges, and leaks from underground storage tanks.
  - It may also apply to highway widening projects in older areas where median and shoulder soils may have been contaminated by aerially deposited lead (ADL).

**Limitations** ■ The procedures and practices presented in this best management practice (BMP) are general. The contractor shall identify appropriate practices and procedures for the specific contaminants known to exist or discovered on site.

**Standards and Specifications** *Identifying Contaminated Areas*

- Contaminated soils are often identified during project planning and development with known locations identified in the plans and specifications. The contractor shall review applicable reports and investigate appropriate call-outs in the plans and specifications.
- The contractor may further identify contaminated soils by investigating:
  - Past site uses and activities.
  - Detected or undetected spills and leaks.
  - Acid or alkaline solutions from exposed soil or rock formations high in acid or alkaline forming elements.

- Look for contaminated soil as evidenced by discoloration, odors, differences in soil properties, abandoned underground tanks or pipes, or buried debris. Test suspected soils at a DHS certified laboratory.

## ***Education***

- Prior to performing any excavation work at the locations containing material classified as hazardous, employees and subcontractors shall complete a safety training program which meets 29 CFR 1910.120 and 8 CCR 5192 covering the potential hazards as identified.
- Educate employees and subcontractors in identification of contaminated soil and on contaminated soil handling and disposal procedures.
- Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings).

## ***Handling Procedures for Material with Aerially Deposited Lead (ADL)***

- Materials from areas designated as containing ADL may, if allowed by the contract special provisions, be excavated, transported, and used in the construction of embankments and/or backfill.
- Excavation, transportation, and placement operations shall result in no visible dust.
- Use caution to prevent spillage of lead containing material during transport.
- Monitor the air quality during excavation of soils contaminated with lead.

## ***Handling Procedures for Contaminated Soils***

- To minimize on-site storage, contaminated soil shall be disposed of properly in accordance with all applicable regulations. All hazardous waste storage will comply with the requirements in Title 22, CCR, Sections 6626.250 to 66265.260.
- Test suspected soils at a DHS approved certified laboratory.
- If the soil is contaminated, work with the local regulatory agencies to develop options for treatment and/or disposal.
- Avoid temporary stockpiling of contaminated soils or hazardous material.
- If temporary stockpiling is necessary:
  - (1) Cover the stockpile with plastic sheeting or tarps.
  - (2) Install a berm around the stockpile to prevent runoff from leaving the area.
  - (3) Do not stockpile in or near storm drains or watercourses.

- Contaminated material and hazardous material on exteriors of transport vehicles shall be removed and placed either into the current transport vehicle or the excavation prior to the vehicle leaving the exclusion zone.
- Monitor the air quality continuously during excavation operations at all locations containing hazardous material.
- Procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work, including registration for transporting vehicles carrying the contaminated material and the hazardous material.
- Collect water from decontamination procedures and treat and/or dispose of it at an appropriate disposal site.
- Collect non-reusable protective equipment, once used by any personnel, and dispose of at an appropriate disposal site.
- Install temporary security fence to surround and secure the exclusion zone. Remove fencing when no longer needed.
- Excavation, transport, and disposal of contaminated material and hazardous material/waste shall be in accordance with the rules and regulations of the following agencies (the specifications of these agencies supersede the procedures outlined in this BMP):
  - United States Department of Transportation (USDOT).
  - United States Environmental Protection Agency (USEPA).
  - California Environmental Protection Agency (CAL-EPA).
  - California Division of Occupation Safety and Health Administration (CAL-OSHA).
  - Local regulatory agencies.

### ***Procedures for Underground Storage Tank Removals***

- Prior to commencing tank removal operations, obtain the required underground storage tank removal permits and approval from the federal, state, and local agencies, which have jurisdiction over such work.
- Arrange to have tested, as directed by the Engineer, any liquid or sludge found in the underground tank prior to its removal to determine if it contains hazardous substances.
- Following the tank removal, take soil samples beneath the excavated tank and perform analysis as required by the local agency representative(s).

- The underground storage tank, any liquid and/or sludge found within the tank, and all contaminated substances and hazardous substances removed during the tank removal shall be transported to disposal facilities permitted to accept such waste.

### **Water Control**

- Take all necessary precautions and preventive measures to prevent the flow of water, including ground water, from mixing with hazardous substances or underground storage tank excavations. Such preventative measures may consist of, but are not limited to: berms, cofferdams, grout curtains, freeze walls, and seal course concrete or any combination thereof.
- If water does enter an excavation and becomes contaminated, such water, when necessary to proceed with the work, shall be dewatered consistent with BMP NS-2, "Dewatering Operations."

### **Maintenance and Inspection**

- The Contractor's Water Pollution Control Manager, foreman, and/or construction supervisor shall monitor on-site contaminated soil storage and disposal procedures.
- Monitor air quality continuously during excavation operations at all locations containing hazardous material.
- Coordinate contaminated soils and hazardous substances/waste management with the appropriate federal, state, and local agencies.
- Inspect hazardous waste receptacles and areas regularly and dispose of hazardous waste within 90 days as specified above.

# APPENDIX C

## GEOGRID SPECIFICATION

# Product Specification - Structural Geogrid BX1200

The structural geogrid shall be an integrally formed grid structure manufactured of a stress resistant polypropylene material with molecular weight and molecular characteristics which impart: (a) high resistance to loss of load capacity or structural integrity when the geogrid is subjected to mechanical stress in installation; (b) high resistance to deformation when the geogrid is subjected to applied force in use; and (c) high resistance to loss of load capacity or structural integrity when the geogrid is subjected to long-term environmental stress.

The structural geogrid shall accept applied force in use by positive mechanical interlock (i.e. by direct mechanical keying) with: (a) compacted soil or construction fill materials; (b) contiguous sections of itself when overlapped and embedded in compacted soil or construction fill materials; and (c) rigid mechanical connectors such as bodkins, pins or hooks. The structural geogrid shall possess sufficient cross sectional profile to present a substantial abutment interface to compacted soil or particulate construction fill materials and to resist movement relative to such materials when subject to applied force. The structural geogrid shall possess sufficient true initial modulus to cause applied force to be transferred to the geogrid at low strain levels without material deformation of the reinforced structure. The structural geogrid shall possess complete continuity of all properties throughout its structure and shall be suitable for reinforcement of compacted soil or particulate construction fill materials to improve their long term stability in structural load bearing applications such as earth retention systems. The structural geogrid shall otherwise have the following characteristics:

**Product Type:** Integrally Formed Structural Geogrid  
**Load Transfer Mechanism:** Positive Mechanical Interlock

## Product Properties

Index Properties	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
▪ Aperture Dimensions <sup>2</sup>	mm (in)	25 (1.0)	33 (1.3)
▪ Minimum Rib Thickness <sup>2</sup>	mm (in)	1.27 (0.05)	1.27 (0.05)
<b>Load Capacity</b>			
▪ True Initial Modulus in Use <sup>3</sup>	kN/m(lb/ft)	400 (27,420)	650 (44,550)
▪ True Tensile Strength @2% Strain <sup>3</sup>	kN/m(lb/ft)	6.0 (410)	9.0 (620)
▪ True Tensile Strength @5% Strain <sup>3</sup>	kN/m(lb/ft)	11.8 (810)	19.6 (1,340)
<b>Structural Integrity</b>			
▪ Junction Efficiency <sup>4</sup>	%	93	
▪ Flexural Stiffness <sup>5</sup>	mg-cm	750,000	
▪ Aperture Stability <sup>6</sup>	kg-cm/deg	6.5	
<b>Durability</b>			
▪ Resistance to Installation Damage <sup>7</sup>	%SC / %SW / %GP	95 / 89 / 86	
▪ Resistance to Long Term Degradation <sup>8</sup>	%	100	

## Dimensions and Delivery

The structural geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 50.0 meters (164 feet) in length. A typical truckload quantity is 165 to 220 rolls. On special request, the structural geogrid may also be custom cut to specific lengths or widths to suit site specific engineering designs.

### Notes

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D-4759. Brief descriptions of test procedures are given in the following notes. Complete descriptions of test procedures are available on request from Tensar Earth Technologies, Inc.
2. Nominal Dimensions.
3. True resistance to elongation when initially subjected to a load measured via ASTM D6637 without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement so as to overstate tensile properties.
4. Load transfer capability measured via GRI-GG2-87. Expressed as a percentage of ultimate tensile strength.
5. Resistance to bending force measured via ASTM D-5732-95, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs (as a "ladder"), and of length sufficiently long to enable measurement of the overhang dimension. The overall Flexural Stiffness is calculated as the square root of the product of machine-and cross-machine-direction Flexural Stiffness values.
6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter (U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity).
7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be measured in accordance with ASTM D6637.
8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments measured via EPA 9090 immersion testing.

Tensar Earth Technologies, Inc.  
 5883 Glenridge Drive, Suite 200  
 Atlanta, Georgia 30328-5363  
 (800) 836-7271

February 1, 2003

This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped to jobsite prior to February 1, 2003.

# APPENDIX D

LIMITED SUBSURFACE  
ENVIRONMENTAL SITE ASSESSMENT

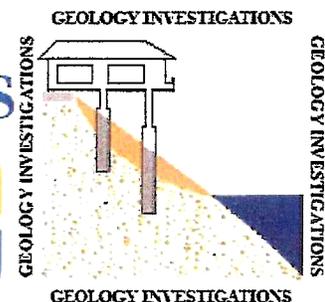
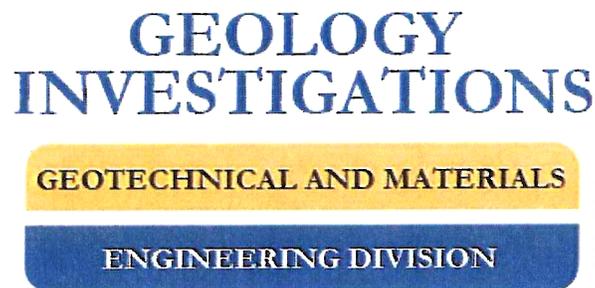
ADMIRALTY WAY SETTLEMENT REPAIR

**LIMITED SUBSURFACE  
ENVIRONMENTAL SITE ASSESSMENT**

**ADMIRALTY WAY SETTLEMENT REPAIR**

**UNINCORPORATED MARINA DEL REY AREA  
LOS ANGELES COUNTY**

**OCTOBER 2009**



**LIMITED SUBSURFACE  
ENVIRONMENTAL SITE ASSESSMENT**

**ADMIRALTY WAY SETTLEMENT REPAIR**

**UNINCORPORATED MARINA DEL REY AREA  
LOS ANGELES COUNTY**

PREPARED FOR

COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC WORKS  
PROGRAMS DEVELOPMENT DIVISION

PREPARED BY

COUNTY OF LOS ANGELES  
DEPARTMENT OF PUBLIC WORKS  
GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION  
GEOLOGY INVESTIGATIONS UNIT

October 6, 2009



## TABLE OF CONTENTS

INTRODUCTION.....	1
SITE DESCRIPTION .....	1
PURPOSE.....	1
SCOPE OF WORK.....	2
SOIL SAMPLE ANALYSES.....	2
SOIL BORING LOCATIONS .....	2
DRILLING METHOD AND SOIL SAMPLING PROCEDURES .....	3
DECONTAMINATION WATER DISPOSAL .....	3
SUBSURFACE MATERIALS .....	3
QUALITY ASSURANCE PROTOCOLS .....	3
SITE HEALTH, SAFETY, AND EMERGENCY CONTINGENCY PLAN.....	4
FINDINGS.....	4
RECOMMENDATIONS.....	5
LIMITATIONS.....	6
REFERENCES.....	7

### TABLES

- TABLE 1 - ANALYTICAL RESULTS FOR TITLE 22 METALS  
TABLE 2 - ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS  
AND VOLATILE ORGANIC COMPOUNDS

### FIGURES

- FIGURE 1 - SITE LOCATION MAP  
FIGURE 2 - BORING/SAMPLING LOCATION MAP

### APPENDICES

- APPENDIX A - ANALYTICAL RESULTS (not included)



## INTRODUCTION

The County of Los Angeles Department of Public Works is proposing improvements to Admiralty Way that will reduce roadway distress that has been an on-going issue. The distress is primarily caused by settlement of the former Venice Dump, which operated during the early to mid-1900's, and was subsequently developed and covered over by the roadway and surrounding urban landscape.

It is our understanding that the proposed roadway improvements include the removal of asphalt, base, and soil to a maximum of 30 inches below existing grade, installation of Geogrid on the bottom of the excavation, placement of 12 inches of granular material, followed by another layer of Geogrid, and pavement reconstruction, and improvements to center medians. Soils removed for the excavation will not be re-used for construction purposes.

## SITE DESCRIPTION

The project is located in the unincorporated Marina del Rey area of Los Angeles County, California. The project site is located on Admiralty Way, beginning approximately 650 feet northeast of Palawan Way and extending approximately 1200 feet to the east-northeast. The northerly side of the study area is bounded by the Oxford Detention Basin, often referred to as the "Duck Pond," and the southerly side is bounded by the Marina City Club. See Figure 1 for the Site Location Map.

## PURPOSE

The purpose of this study was to evaluate on-site soils for disposal requirements and determine if special worker health and safety protocols may be required during construction of the proposed improvements. A limited subsurface environmental site assessment was previously conducted by Geotechnical and Materials Engineering Division (GMED) for proposed waterline and sewer upgrades along Admiralty Way that indicated elevated concentrations of some Title 22 Metals and Total Petroleum Hydrocarbons (TPH) in the upper 3-feet of soil on the northerly side of the roadway. The current assessment is supplemental to the previous assessment and focused on determining the occurrence and concentrations of Title 22 Metals in sub-grade soils. Where elevated concentrations of Title 22 Metals or TPH were encountered, the information is used to define the lateral extent of Title 22 Metal-impacted soils and TPH-impacted soils and provide the limits of Special Excavation Criteria Areas (SECAs).



## SCOPE OF WORK

The scope of work included the following

- Coring through existing asphalt and base at seven locations and then hand-augering to a maximum depth of 3 feet below existing grade
- Sampling at 6-inch intervals from the bottom of the road base to a maximum of 3 feet below existing grade.
- Submitting all soil samples for laboratory testing of Title 22 Metals
- Preparing this final assessment report that provides findings and recommendations for SECAs

## SOIL SAMPLE ANALYSES

All soil samples were submitted to Sierra Analytical Laboratory, Inc., a California-certified environmental laboratory located in Laguna Hills, California. All soil samples were analyzed by the Environmental Protection Agency (EPA) Test Method 6010B for Title 22 Metals and 7471A for mercury to determine Total Threshold Limit Concentrations (TTLC). When total metals concentration results for soil (TTLC) had concentrations greater than or equal to 10 times the Soluble Threshold Limit Concentration (STLC), soil samples were also tested by the California Waste Extraction Test (WET) for STLC and EPA Test Method 1311 for Toxicity Characteristic Leaching Procedure (TCLP), when applicable. Analytical results are presented in Table 1. Table 2 presents analytical results for EPA Test Methods 8015B for Total Petroleum Hydrocarbons-Carbon Chain (TPH-CC) and 8260B for Volatile Organic Compounds (VOCs) from the previous GMED environmental site assessment. Appendix A contains copies of the analytical reports.

## SOIL BORING LOCATIONS

Soil borings were located in areas where the previous assessment indicated elevated concentrations of Title 22 Metals. A boring was also excavated in the area where previous assessments indicated elevated TPH concentrations, however, samples could not be collected due to the thickness of the asphalt at this location. Figure 2 shows boring locations, including those excavated during the previous waterline and sewer soil assessments.



## **DRILLING METHOD AND SOIL SAMPLING PROCEDURES**

GMED obtained an inquiry identification number from Underground Service Alert (USA) at least two working days prior to sampling activities. All borings were completed using hand augering equipment. As shown in Figure 2, eleven soil borings were hand augered with sample collection depth ranging from 18- to 36-inches below existing grade, backfilled with soil cuttings generated from augering, and were capped with the asphalt core and completed to the surface with cold patch asphalt. All soil samples were collected in new 4- and 8-ounce laboratory-supplied sampling jars with sealing lids and labeled as appropriate.

Prior to excavating each boring, the hand auger was decontaminated by washing the auger in a solution of water and a non-phosphate cleaner. The auger was then rinsed in potable water followed by non-ionized distilled water and allowed to air dry.

## **DECONTAMINATION WATER DISPOSAL**

All decontamination water was contained in a U.S. Department of Transportation-approved 55-gallon drum and properly labeled with generator and content information. The drum was temporarily stored and secured at a Public Works facility and a grab sample was collected from the drummed decontamination water and analyzed. After reviewing the laboratory results, the water was profiled as non-hazardous and transported by a State-certified hazardous waste hauler to an appropriate regulated facility for recycling.

## **SUBSURFACE MATERIALS**

Soils sampled consisted primarily of fill materials placed to build and maintain Admiralty Way and were composed mainly of clayey sands and silts with building debris common, including glass and brick fragments. Neither bedrock nor groundwater was encountered in any of the excavations. Figure 2 shows the sampling locations.

## **QUALITY ASSURANCE PROTOCOLS**

The following quality assurance protocols were performed to ensure that soil sampling and laboratory testing procedures were performed properly and appropriately documented.

- Sample label forms were prepared prior to the beginning of field operations. All samples were assigned a unique identification number. The sample number includes the soil boring origin based on centerline station number from the previous soil assessment and depth in inches.



- Custody information was recorded on a chain-of-custody form provided by the laboratory. The chain-of-custody form was produced in triplicate, which provided for the form to accompany the samples in transit to the laboratory, a copy for the laboratory, and a copy for field personnel.
- Labeled samples were sealed in zip-lock plastic bags and placed in an ice-filled cooler. The samples contained within the cooler were maintained under the sampler's control until they were relinquished to the laboratory at the end of the day. Upon delivery of the samples, the sampler relinquished custody to laboratory personnel.
- Field sampling operations were performed and overseen by a State of California registered professional geologist.
- Sample locations were measured in the field by measuring wheels and plotted on a site map.
- The laboratory used the practical quantitation limits required for California Regional Water Quality Control Board submittals, when appropriate.
- Data validation performed by the laboratory quality assurance officer was to Tier 2 Quality Assurance/Quality Control (QA/QC) standards. The laboratory report included, when appropriate as part of its QA/QC program, standards, check standards, blanks, spikes, and duplicate information.
- Data validation performed by Public Works included reviewing results to assure that samples were analyzed within proper holding times, detection limits were met, and results were within stated QA/QC parameters.

### **SITE HEALTH, SAFETY, AND EMERGENCY CONTINGENCY PLAN**

A site health, safety, and emergency contingency plan was developed specifically for the project, which was reviewed, signed, and dated by all field workers prior to the beginning of field work. The purpose of the plan was to highlight "Safety on the Job" during sampling activities.

### **FINDINGS**

The majority of soil samples analyzed contained total lead concentrations that exceeded 10 times the STLC and several samples contained total barium, cadmium, chromium, or copper concentrations that exceeded 10 times the STLC of the respective analytes. In most cases Regional Screening Levels (RSLs), published by the EPA, were not



exceeded for any of the samples analyzed. In those cases where metals concentrations were 10 times or greater than the STLC, samples were re-analyzed using STLC and TCLP methods, which simulate water passing through the soil to determine if the analyte is leachable. The TCLP value was not exceeded for any soil samples tested, therefore, no soils are considered federal hazardous waste. The STLC value for lead was exceeded in all but one sample location. The previous limited environmental assessment indicated elevated TPH at one location as well.

## RECOMMENDATIONS

Based on the data presented in this report, establishment of SECAs for contaminated soil handling and disposal protocols and worker health and safety are required as follows:

- SECA for Title 22 Metals:  
Northerly Side – Construction Centerline Station 17+80 to 23+20

Soil within this zone is considered California non Resource Conservation and Recovery Act hazardous waste and may require special handling during construction. Contaminated soil should be segregated from clean soil and properly stored on site until such time it is removed for disposal. Soil shall be transported under uniform hazardous waste manifest for disposal to an agency-approved Class I hazardous waste disposal facility.

- SECA for TPH (oil and grease)  
Southerly Side – Construction Centerline Station 26+40 to 26+90

Soil excavated within the SECA for TPH shall be transported under non-hazardous waste manifest for treatment and recycling at an agency-approved treatment and recycling facility.

SECA locations are shown on Figure 2, which extend laterally, as shown, and the width is considered to be from the edge of the existing curb or pavement to the center of the existing median to a maximum depth of 36 inches below existing grade.

- Because the proposed improvements are within the former Venice Dump, a gas detector should be used by qualified personnel to monitor for potential explosive and harmful gases during construction.
- Construction personnel working in the SECAs or in areas with detected explosive or harmful gases should have appropriate training for this type of work environment and use appropriate personal protective equipment.



- A site-specific health and safety plan should be developed for personnel working within the SECAs or other areas affected by adverse environmental conditions.

### LIMITATIONS

This report has been prepared for the exclusive use of Los Angeles County Department of Public Works for the specific site discussed herein and should not be considered transferable to other sites or projects.

This study was conducted according to generally accepted environmental geology practice for projects of this magnitude. Our findings and recommendations are based on the data available and our interpretation of the data based on our experience and background. Hence, our conclusions and recommendations are professional opinions and are not meant to be a control of nature, therefore, no warranty is herein expressed or implied.

No field investigation is thorough enough to completely exclude the presence of hazardous substances at a given site. If hazardous substances have not been identified during the assessment, such a conclusion should not be construed as a guarantee of the absence of such substances. Boring exploration and sampling is only representative of a small area of the proposed excavation. Therefore, it is possible that contaminated conditions may be encountered in the field during construction and will require the establishment of a SECA.

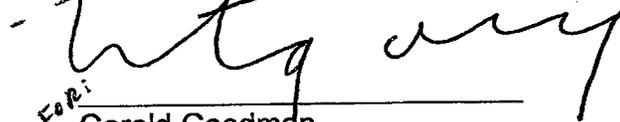
If you have any questions regarding this matter, please contact Karin Burger or Gerald Goodman of the Geotechnical and Materials Engineering Division at (626)458-4923.

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PGME/SEC/GEOINV/ADMIRALTY WAY ESA



## REFERENCES

County of Los Angeles Department of County Engineer, "Countywide Plan Water and Wastewater Element; Index of Solid Waste and Liquid Industrial Waste Disposal Sites for 630 Series Coordinate Base Maps (Map No 42.160-435)," Project Planning and Pollution Control Division, October 1976.

County of Los Angeles Department of Public Works, 'Admiralty Way Settlement Repair Project, Geotechnical Recommendations, Project ID RDC0015061,' Geotechnical and Materials Engineering Division, June 16, 2008

County of Los Angeles Department of Public Works, 'Admiralty Way Settlement Repair Project, Addendum Geotechnical Investigation, Marina del Rey, Project ID RDC0015061,' Geotechnical and Materials Engineering Division, September 2009.

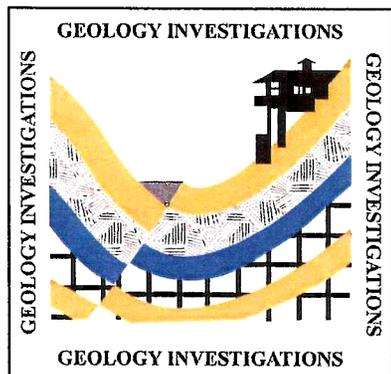
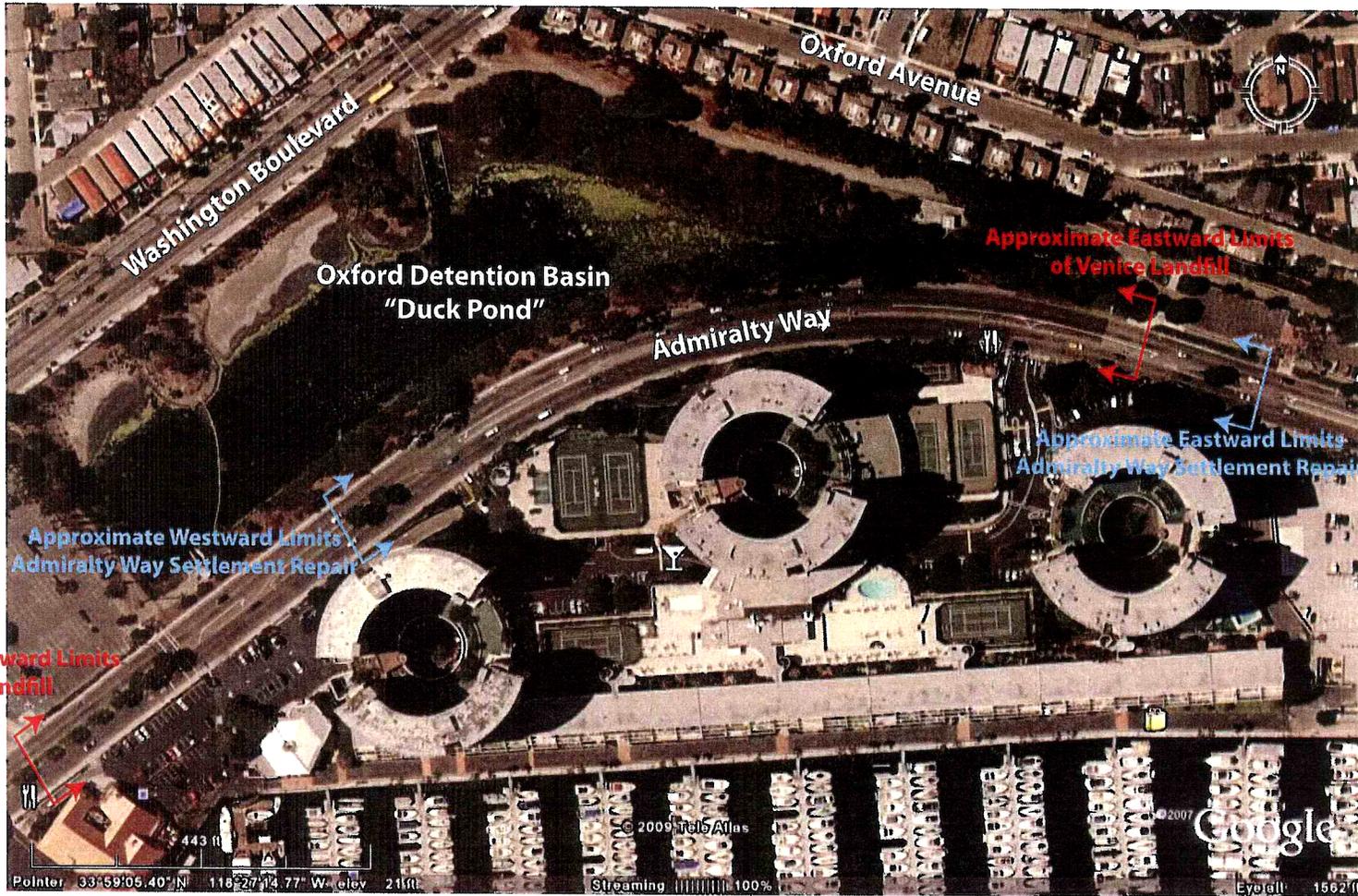
County of Los Angeles Department of Public Works, "Subsurface Soil and Groundwater Assessment, Marina del Rey Waterline Phase II, Unincorporated Marina del Rey," Geotechnical and Materials Engineering Division, June 2009

Environmental Protection Agency, "Regional Screening Level (RSL) Table Master April 2009\*," Region 9 Superfund, April 2009

\*[http://www.epa.gov/region09/superfund/prg/pdf/composite\\_sl\\_table\\_run\\_APRIL2009.pdf](http://www.epa.gov/region09/superfund/prg/pdf/composite_sl_table_run_APRIL2009.pdf)



## FIGURES



<b>LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS</b>			
GEOLOGY INVESTIGATIONS SECTION			
<b>SITE LOCATION MAP</b>			
<b>LIMITED SHALLOW SUBSURFACE ENVIRONMENTAL SITE ASSESSMENT</b>			
<b>ADMIRALTY WAY SETTLEMENT REPAIR PROJECT</b>			
<b>UNINCORPORATED MARINA DEL REY AREA, LOS ANGELES COUNTY</b>			
Date: August 2009	Drafted by: KLB	Scale: As Shown	<b>FIGURE 1</b>



**TABLES**

**Table 1**  
**Analytical Results for Title 22 Metals**  
**Admiralty Way Settlement Repair, Marina del Rey**

Boring Number		B-25*	B-26*	B-27*	B-28*	B-29*	B-68*	B-69*	B-70*		B-71*					
Asphalt Thickness		8 in.	8 in.	8 in.	8 in.	8 in.	8 in.	8 in.	8 in.		8 in.					
Base Thickness		12 in.	12 in.	12 in.	12 in.	12 in.	12 in.	12 in.	12 in.		12 in.					
Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		Soil					
Date Sampled		9/26/08	9/26/08	9/26/08	9/26/08	9/25/08	10/3/08	10/8/08	10/8/08		10/8/08					
Sample Identification		B25-1	B26-1	B27-1	B28-1	B29-1	B68-1	B69-1	B70-1		B71-1					
Sample Depth		2.5 ft.	2.5 ft.	2.5 ft.	2.5 ft.	2.5 ft.	2.5 ft.	2.5 ft.	2.5 ft.		2.5 ft.					
EPA Analytical Method	Analyte	TTL	RSL IN	STLC	TCLP	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/L	mg/Kg	mg/L		
		mg/Kg	mg/Kg	mg/L	mg/L											
6010B	Silver	500	5,100	5	5	0.92	ND	2.1	1.7	ND	ND	1.9	2.9	STLC NA TCLP NA	8.3	STLC NA TCLP NA
6010B	Arsenic	500	1.6	5.0	5.0	1.8	2	ND	ND	ND	ND	ND	25	STLC NA TCLP NA	11	STLC NA TCLP NA
6010B	Barium	10,000	19,000	100	100	100	54	150	130	34	52	110	510	STLC NA TCLP NA	540	STLC NA TCLP NA
6010B	Beryllium	75	2,000	0.75	N/A	ND	ND	ND	ND	ND	ND	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Cadmium	100	800	1.0	1.0	0.52	ND	ND	0.64	ND	ND	ND	4.3	STLC NA TCLP NA	6.9	STLC NA TCLP NA
6010B	Cobalt	8,000	300	80	N/A	5.4	5.1	8.8	6.6	3.7	4.3	6.6	8.7	STLC NA TCLP NA	9	STLC NA TCLP NA
6010B	Chromium	2,500	1500000 <sup>†</sup>	5	5	16	15	12	20	12	14	6.2	300	STLC 0.57 TCLP ND	65	STLC 2.4 TCLP ND
6010B	Copper	2,500	41,000	25	N/A	30	19	21	45	6.8	9.6	11	260	STLC 9.87 TCLP 0.16	390	STLC 1.33 TCLP ND
7471A	Mercury	20	24	0.2	0.2	ND	ND	ND	ND	ND	ND	ND	ND	STLC NA TCLP NA	0.18	STLC NA TCLP NA
6010B	Molybdenum	3,500	5,100	350	N/A	ND	ND	ND	2.5	ND	ND	ND	11	STLC NA TCLP NA	8.9	STLC NA TCLP NA
6010B	Nickel	2,000	20,000	20	N/A	12	11	7.5	19	7.1	7.6	4.4	160	STLC NA TCLP NA	68	STLC NA TCLP NA
6010B	Lead	1,000	800	5.0	5.0	17	16	14	55	2.5	4.9	1.7	490	STLC 2.09 TCLP 0.50	580	STLC 24.1 TCLP ND
6010B	Antimony	500	410	15	N/A	ND	ND	ND	ND	ND	ND	ND	13	STLC NA TCLP NA	21	STLC NA TCLP NA
6010B	Selenium	100	5,100	1.0	1.0	ND	ND	ND	ND	ND	ND	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Thallium	700	66	7.0	N/A	ND	ND	ND	ND	ND	ND	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Vanadium	2,400	7,200	24	N/A	27	26	38	32	20	27	31	27	STLC NA TCLP NA	36	STLC NA TCLP NA
6010B	Zinc	5,000	310,000	250	N/A	110	47	54	120	18	21	43	780	STLC NA TCLP NA	950	STLC NA TCLP NA

**Acronyms/Abbreviations:**

ND = Not detected.  
 NA = Not analyzed.  
 mg/Kg = Milligrams per kilogram.  
 mg/L = Milligrams per Liter.  
 TTL = Total Threshold Limit Concentration for Soil.  
 STLC = Soluble Threshold Limit Concentration for Soil.  
 TCLP = Toxicity Characteristic Leaching Procedure.  
 RSL IN = Regional Screening Levels for Soil in an Industrial Site.

 = Concentration exceeds 10x STLC.

 = Concentration exceeds STLC.

**Notes:**

- A) STLC values from Title 22 California Code of Regulations §66261.24 (July 2008).
- B) TCLP values from Title 40 Code of Federal Regulations §261.24 (July 2007).
- C) RSL IN values from US Environmental Protection Agency, Region IX (April 2009).
- D) Laboratory reporting limit is based on the practical quantitation limit times the dilution factor.
- \*Sampled as part of waterline or sewer line environmental site assessment
- <sup>†</sup>Chromium III (insoluble salts)

**Table 1 (cont.)  
Analytical Results for Title 22 Metals  
Admiralty Way Settlement Repair, Marina del Rey**

Boring Number		71E1		71E2				71E3				B-72*							
Asphalt Thickness		8.5 in.		7 in.				10 in.				8 in.							
Base Thickness		14 in.		13.5 in.				14 in.				7 in.							
Matrix		Soil		Soil				Soil				Soil							
Date Sampled		6/9/09		6/9/09				6/9/09				10/9/08							
Sample Identification		71E1-30		71E2-24		71E2-30		71E2-36		71E3-30		71E3-36		B72-1					
Sample Depth		30 in.		24 in.		30 in.		36 in.		30 in.		36 in.		2.5 ft.					
EPA Analytical Method	Analyte	TTLIC mg/Kg	RSL IN mg/Kg	STLC mg/L	TCLP mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L				
6010B	Silver	500	5,100	5	5	2.2	STLC NA TCLP NA	1.1	STLC NA TCLP NA	ND	STLC NA TCLP NA	0.84	STLC NA TCLP NA	ND	STLC NA TCLP NA	3.6	STLC NA TCLP NA		
6010B	Arsenic	500	1.6	5.0	5.0	7	STLC NA TCLP NA	8.2	STLC NA TCLP NA	8.4	STLC NA TCLP NA	7.4	STLC NA TCLP NA	7.8	STLC NA TCLP NA	5.3	STLC NA TCLP NA	9.9	STLC NA TCLP NA
6010B	Barium	10,000	19,000	100	100	1000	STLC 0.43 TCLP 0.13	270	STLC NA TCLP NA	240	STLC NA TCLP NA	220	STLC NA TCLP NA	190	STLC NA TCLP NA	190	STLC NA TCLP NA	450	STLC NA TCLP NA
6010B	Beryllium	75	2,000	0.75	N/A	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Cadmium	100	800	1.0	1.0	5.6	STLC NA TCLP NA	2.9	STLC NA TCLP NA	1.8	STLC NA TCLP NA	1.5	STLC NA TCLP NA	2.4	STLC NA TCLP NA	2.3	STLC NA TCLP NA	4.3	STLC NA TCLP NA
6010B	Cobalt	8,000	300	80	N/A	9.9	STLC NA TCLP NA	7.8	STLC NA TCLP NA	7.6	STLC NA TCLP NA	7.3	STLC NA TCLP NA	7.9	STLC NA TCLP NA	8.3	STLC NA TCLP NA	8.5	STLC NA TCLP NA
6010B	Chromium	2,500	1500000†	5	5	280	STLC 1.94 TCLP ND	37	STLC NA TCLP NA	34	STLC NA TCLP NA	32	STLC NA TCLP NA	40	STLC NA TCLP NA	32	STLC NA TCLP NA	59	STLC NA TCLP NA
6010B	Copper	2,500	41,000	25	N/A	500	STLC 8.2 TCLP NA	120	STLC NA TCLP NA	110	STLC NA TCLP NA	130	STLC NA TCLP NA	93	STLC NA TCLP NA	85	STLC NA TCLP NA	740	STLC NA TCLP NA
7471A	Mercury	20	24	0.2	0.2	0.17	STLC NA TCLP NA	0.15	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Molybdenum	3,500	5,100	350	N/A	28	STLC NA TCLP NA	3.4	STLC NA TCLP NA	3.3	STLC NA TCLP NA	3.4	STLC NA TCLP NA	2.8	STLC NA TCLP NA	1.6	STLC NA TCLP NA	10	STLC NA TCLP NA
6010B	Nickel	2,000	20,000	20	N/A	180	STLC NA TCLP NA	26	STLC NA TCLP NA	26	STLC NA TCLP NA	20	STLC NA TCLP NA	22	STLC NA TCLP NA	19	STLC NA TCLP NA	66	STLC NA TCLP NA
6010B	Lead	1,000	800	5.0	5.0	650	STLC 0.7 TCLP ND	150	STLC 9.73 TCLP 0.49	200	STLC 44.3 TCLP 0.17	130	STLC 7.76 TCLP ND	140	STLC 7.31 TCLP 0.14	100	STLC 5.03 TCLP ND	1,100	STLC NA TCLP NA
6010B	Antimony	500	410	15	N/A	6.9	STLC NA TCLP NA	3.2	STLC NA TCLP NA	3.5	STLC NA TCLP NA	1.4	STLC NA TCLP NA	3.6	STLC NA TCLP NA	2.1	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Selenium	100	5,100	1.0	1.0	3.7	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Thallium	700	66	7.0	N/A	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA
6010B	Vanadium	2,400	7,200	24	N/A	28	STLC NA TCLP NA	44	STLC NA TCLP NA	41	STLC NA TCLP NA	43	STLC NA TCLP NA	38	STLC NA TCLP NA	46	STLC NA TCLP NA	39	STLC NA TCLP NA
6010B	Zinc	5,000	310,000	250	N/A	640	STLC NA TCLP NA	360	STLC NA TCLP NA	310	STLC NA TCLP NA	260	STLC NA TCLP NA	290	STLC NA TCLP NA	250	STLC NA TCLP NA	730	STLC NA TCLP NA

**Acronyms/Abbreviations:**

ND = Not detected.  
 NA = Not analyzed.  
 mg/Kg = Milligrams per kilogram.  
 mg/L = Milligrams per Liter.  
 TTLIC = Total Threshold Limit Concentration for Soil.  
 STLC = Soluble Threshold Limit Concentration for Soil.  
 TCLP = Toxicity Characteristic Leaching Procedure.  
 RSL IN = Regional Screening Levels for Soil in an Industrial Site.

 = Concentration exceeds 10x STLC.  
 = Concentration exceeds STLC.  
 = Concentration exceeds TTLIC.

**Notes:**

- A) STLC values from Title 22 California Code of Regulations §66261.24 (July 2008).
- B) TCLP values from Title 40 Code of Federal Regulations §261.24 (July 2007).
- C) RSL IN values from US Environmental Protection Agency, Region IX (April 2009).
- D) Laboratory reporting limit is based on the practical quantitation limit times the dilution factor.

\*Sampled as part of waterline or sewer line environmental site assessment

†Chromium III (insoluble salts)

**Table 1 (cont.)  
Analytical Results for Title 22 Metals  
Admiralty Way Settlement Repair, Marina del Rey**

Boring Number						72W1					72W2						72W3						
Asphalt Thickness						8 in.					8 in.						10.5 in.						
Base Thickness						7 in.					8 in.						5 in.						
Matrix						Soil					Soil						Soil						
Date Sampled						6/9/09					6/9/09						6/9/09						
Sample Identification						72W1-18		72W1-24		72W1-30			72W2-18		72W2-24		72W2-30			72W3-18		72W3-24	
Sample Depth						18 in.		24 in.		30 in.			18 in.		24 in.		30 in.			18 in.		24 in.	
EPA Analytical Method	Analyte	TTLc	RSL IN	STLC	TCLP	mg/Kg	mg/L	mg/Kg	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	
		mg/Kg	mg/Kg	mg/L	mg/L																		mg/Kg
6010B	Silver	500	5,100	5	5	ND	STLC NA TCLP NA	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	0.89	STLC NA TCLP NA	1.7	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	
6010B	Arsenic	500	1.6	5.0	5.0	9.6	STLC NA TCLP NA	4.9	12	STLC NA TCLP NA	12	STLC NA TCLP NA	11	STLC NA TCLP NA	12	STLC NA TCLP NA	8.2	STLC NA TCLP NA	25	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Barium	10,000	19,000	100	100	310	STLC NA TCLP NA	140	470	STLC NA TCLP NA	470	STLC NA TCLP NA	480	STLC NA TCLP NA	480	STLC NA TCLP NA	190	STLC NA TCLP NA	560	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Beryllium	75	2,000	0.75	N/A	ND	STLC NA TCLP NA	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Cadmium	100	800	1.0	1.0	2.6	STLC NA TCLP NA	3.1	4.6	STLC NA TCLP NA	4.6	STLC NA TCLP NA	5.1	STLC NA TCLP NA	8	STLC NA TCLP NA	1.3	STLC NA TCLP NA	13	STLC 0.15 TCLP ND	STLC NA TCLP NA		
6010B	Cobalt	8,000	300	80	N/A	8.1	STLC NA TCLP NA	6.7	8.5	STLC NA TCLP NA	8.5	STLC NA TCLP NA	8.5	STLC NA TCLP NA	8.4	STLC NA TCLP NA	7.8	STLC NA TCLP NA	8.2	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Chromium	2,500	1500000†	5	5	39	STLC NA TCLP NA	28	44	STLC NA TCLP NA	44	STLC NA TCLP NA	300	STLC 0.31 TCLP ND	54	STLC 0.71 TCLP 1.24	49	STLC NA TCLP NA	49	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Copper	2,500	41,000	25	N/A	170	STLC NA TCLP NA	52	210	STLC NA TCLP NA	210	STLC NA TCLP NA	350	STLC 24.2 TCLP NA	260	STLC 18.8 TCLP NA	75	STLC NA TCLP NA	330	STLC 0.42 TCLP NA	STLC NA TCLP NA		
7471A	Mercury	20	24	0.2	0.2	0.27	STLC NA TCLP NA	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	0.21	STLC NA TCLP NA	ND	STLC NA TCLP NA	0.3	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Molybdenum	3,500	5,100	350	N/A	4	STLC NA TCLP NA	2	6.9	STLC NA TCLP NA	6.9	STLC NA TCLP NA	5.7	STLC NA TCLP NA	7.4	STLC NA TCLP NA	7.3	STLC NA TCLP NA	4.7	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Nickel	2,000	20,000	20	N/A	28	STLC NA TCLP NA	20	38	STLC NA TCLP NA	38	STLC NA TCLP NA	170	STLC NA TCLP NA	34	STLC NA TCLP NA	37	STLC NA TCLP NA	33	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Lead	1,000	800	5.0	5.0	180	STLC 7.97 TCLP 0.23	46	320	STLC 10.6 TCLP 0.77	320	STLC ND TCLP ND	650	STLC 2.67 TCLP 0.13	460	STLC 77.4 TCLP 1.24	120	STLC 3.15 TCLP ND	460	STLC 0.32 TCLP ND	STLC NA TCLP NA		
6010B	Antimony	500	410	15	N/A	4.1	STLC NA TCLP NA	ND	6.3	STLC NA TCLP NA	6.3	STLC NA TCLP NA	11	STLC NA TCLP NA	5.7	STLC NA TCLP NA	2.5	STLC NA TCLP NA	11	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Selenium	100	5,100	1.0	1.0	ND	STLC NA TCLP NA	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	4	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Thallium	700	66	7.0	N/A	ND	STLC NA TCLP NA	ND	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	ND	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Vanadium	2,400	7,200	24	N/A	41	STLC NA TCLP NA	46	42	STLC NA TCLP NA	42	STLC NA TCLP NA	31	STLC NA TCLP NA	41	STLC NA TCLP NA	48	STLC NA TCLP NA	17	STLC NA TCLP NA	STLC NA TCLP NA		
6010B	Zinc	5,000	310,000	250	N/A	630	STLC NA TCLP NA	160	720	STLC NA TCLP NA	720	STLC NA TCLP NA	770	STLC NA TCLP NA	840	STLC NA TCLP NA	210	STLC NA TCLP NA	9900	STLC NA TCLP NA	STLC NA TCLP NA		

**Acronyms/Abbreviations:**

ND = Not detected.  
 NA = Not analyzed.  
 mg/Kg = Milligrams per kilogram.  
 mg/L = Milligrams per Liter.  
 TTLc = Total Threshold Limit Concentration for Soil.  
 STLC = Soluble Threshold Limit Concentration for Soil.  
 TCLP = Toxicity Characteristic Leaching Procedure.  
 RSL IN = Regional Screening Levels for Soil in an Industrial Site.

 = Concentration exceeds 10x STLC.  
 = Concentration exceeds STLC.  
 = Concentration exceeds TTLc.

**Notes:**

- A) STLC values from Title 22 California Code of Regulations §66261.24 (July 2008).
  - B) TCLP values from Title 40 Code of Federal Regulations §261.24 (July 2007).
  - C) RSL IN values from US Environmental Protection Agency, Region IX (April 2009).
  - D) Laboratory reporting limit is based on the practical quantitation limit times the dilution factor.
- \*Sampled as part of waterline or sewer line environmental site assessment  
 †Chromium III (insoluble salts)

**Table 1 (cont.)  
Analytical Results for Title 22 Metals  
Admiralty Way Settlement Repair, Marina del Rey**

		Boring Number				C-4		C-5		C-6		C-7	
		Asphalt Thickness				7 in.		9 in.		7 in.		6 in.	
		Base Thickness				19 in.		20 in.		19 in.		12 in.	
		Matrix				Soil		Soil		Soil		Soil	
		Date Sampled				9/3/09		9/3/09		9/3/09		9/3/09	
		Sample Identification				C-4		C-5		C-6		C-7	
		Sample Depth				30 in.		30 in.		30 in.		30 in.	
EPA Analytical Method	Analyte	TTLIC	RSL IN	STLC	TCLP	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L	mg/Kg	mg/L
		mg/Kg	mg/Kg	mg/L	mg/L								
6010B	Silver	500	5,100	5	5	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Arsenic	500	16	5.0	5.0	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Barium	10,000	19,000	100	100	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Beryllium	75	2,000	0.75	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Cadmium	100	800	1.0	1.0	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Cobalt	8,000	300	80	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Chromium	2,500	1500000 <sup>†</sup>	5	5	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Copper	2,500	41,000	25	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
7471A	Mercury	20	24	0.2	0.2	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Molybdenum	3,500	5,100	350	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Nickel	2,000	20,000	20	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Lead	1,000	800	5.0	5.0	189	STLC 25.6 TCLP 0.072J	170	STLC 20.4 TCLP 0.096J	246	STLC 22.8 TCLP 0.964	395	STLC 21.5 TCLP 0.246
6010B	Antimony	500	410	15	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Selenium	100	5,100	1.0	1.0	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Thallium	700	66	7.0	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Vanadium	2,400	7,200	24	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA
6010B	Zinc	5,000	310,000	250	N/A	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA	NA	STLC NA TCLP NA

**Acronyms/Abbreviations:**

- ND = Not detected.
- NA = Not analyzed.
- mg/Kg = Milligrams per kilogram.
- mg/L = Milligrams per Liter.
- TTLIC = Total Threshold Limit Concentration for Soil.
- STLC = Soluble Threshold Limit Concentration for Soil.
- TCLP = Toxicity Characteristic Leaching Procedure.
- RSL IN = Regional Screening Levels for Soil in an Industrial Site.

= Concentration exceeds 10x STLC.

= Concentration exceeds STLC.

**Notes:**

A) STLC values from Title 22 California Code of Regulations §66261.24 (July 2008).

B) TCLP values from Title 40 Code of Federal Regulations §261.24 (July 2007).

C) RSL IN values from US Environmental Protection Agency, Region IX (April 2009).

D) Laboratory reporting limit is based on the practical quantitation limit times the dilution factor.

\*Sampled as part of waterline or sewer line environmental site assessment

<sup>†</sup>Chromium III (insoluble salts)

**Table 2**  
**Total Petroleum Hydrocarbons-carbon chain (TPH-cc) and Volatile Organic Compounds (VOCs)**  
**Admiralty Way Settlement Repair, Marina del Rey**

Boring Number		B-25	B-26	B-27	B-28	B-29	B68	B69	B70	B71	B72
Sample Identification		B25-1	B26-1	B27-1	B28-1	B29-1	B68-1	B69-1	B70-1	B71-1	B72-1
Sample Depth		2.5 ft.									
Matrix		Soil									
EPA Analytical Method	Analyte	09/26/08	09/26/08	09/26/08	09/26/08	09/26/08	10/03/08	10/08/08	10/08/08	10/08/08	01/00/00
		mg/Kg									
8015B	CC < C8	ND									
8015B	C8 ≤ CC < C9	ND									
8015B	C9 ≤ CC < C10	ND									
8015B	C10 ≤ CC < C11	ND									
8015B	C11 ≤ CC < C12	ND									
8015B	C12 ≤ CC < C14	ND									
8015B	C14 ≤ CC < C16	ND									
8015B	C16 ≤ CC < C18	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND
8015B	C18 ≤ CC < C20	ND	ND	ND	ND	ND	4.5	ND	ND	1	1
8015B	C20 ≤ CC < C24	3.7	1.8	1	10	1	19	ND	5	5.3	5.3
8015B	C24 ≤ CC < C28	61	48	20	280	28	47	ND	100	50	50
8015B	C28 ≤ CC < C32	370	120	92	1,200	170	74	ND	270	220	220
8015B	CC ≥ C32	30	9.1	7.6	130	13	5.2	ND	23	16	16
8015B	C7 - C36 (TPH)	460	170	120	1,600	210	150	ND	400	290	290
8260B	VOCs	ND									

**Acronyms/Abbreviations:**

ND = Not detected above the indicated laboratory reporting limit.  
mg/Kg = Milligrams per kilogram

  = exceeds 1,000 mg/Kg.

**Notes:**

- A) Laboratory reporting limit is based on the practical quantitation limit times the dilution factor.
- B) VOCs not detected from 5.0 to 25 mg/Kg.

# APPENDIX E

Table 11  
Traffic on Streets in the Vicinity of Admiralty Way  
Settlement Project

Table 11: Traffic on Streets in the Vicinity of the Admiralty Way Settlement Project

Route / Street	Between		Peak Hour		Peak Month (Peak Daily Traffic)		Average Daily Traffic	
			North or East bound	South or West bound	North or East bound	South or West bound	North or East bound	South or West bound
<b>1*</b>	Jefferson	Culver Blvd.	4750	4750	58000	58000	52000	52000
<b>1*</b>	Culver Blvd.	Jxn Rte 90, Marina Freeway	4800	3950	58000	49500	53000	45000
<b>1*</b>	Jxn Rte 90, Marina Freeway	Washington Blvd	4750	4800	61000	63000	56000	58000
<b>90*</b>	Jxn Rte 1, Lincoln Blvd.	Mindanao Way	2400	2400	31000	31000	29500	29500
<b>90*</b>	Mindanao Way	Culver Blvd.	4400	4400	56000	56000	54000	54000
<b>90*</b>	Culver Blvd.	Centinela Ave.	5000	5000	64000	64000	62000	62000
<b>90*</b>	Centinela Ave.	Jxn Rte 405, San Diego Freeway	6200	6200	81000	81000	78000	78000
<b>Admiralty Way</b>	Via Marina**	Palawan Way+	1304	1407				
<b>Admiralty Way</b>	Palawan Way**	Bali Way++	1376	1644				

\*2009 Data from California Department of Transportation (<http://traffic-counts.dot.ca.gov/index.htm>)

\*\*Mar 2010 Data from Los Angeles County Department of Public Works

+Aug 2007 Data from Los Angeles County Department of Public Works

++Jan-Jun 2007 Data from Los Angeles County Department of Public Works

# APPENDIX F

Project Design Concept  
Admiralty Way Settlement Repair Project

February 26, 2009

TO: Sree Kumar   
FROM: Sam Chinn  
Highway Section II

**PROJECT DESIGN CONCEPT  
ADMIRALTY WAY SETTLEMENT REPAIR PROJECT  
PROJECT ID RDC0015061, PCA X2401369  
RD 433, SD4, MD3**

The proposed road reconstruction project is in the unincorporated County area of Marina del Rey (see attached map). The following is a summary of the existing conditions and the proposed scope of work:

	<u>Scope</u>	<u>Jurisdiction</u>
<b>Admiralty Way- 900 feet east of Palawan Way to 2,200 feet east of Palawan Way (T.G. 672 J6, 0.25 mile)</b>	Reconstruct	County

**BACKGROUND**

This project was initiated by requests from the Department of Beaches and Harbors and local residents in the Marina area with concerns regarding the settlement of Admiralty Way in front of the Marina City Club. A summary of the findings of a Geotechnical Recommendations report by Geotechnical and Materials Engineering Division is described below.

The distress along Admiralty Way is approximately 1,200 feet in length and consists of cracks along the outboard lane of the road and uneven sidewalk adjacent to the Oxford Basin. Road Maintenance Division reported that some segments of the roadway have settled as much as 9 feet. To repair the settlement, additional layers of asphalt concrete (AC) have been applied to various areas to maintain the existing street grade.

This section of roadway undergoing settlement is located within a former landfill known as the Venice Dump. According to the report, the Venice Dump operated during the early to mid-1900s and is currently closed.

The roadway distress appears to be caused by consolidation settlement of the poor quality fill material and the underlying soft clay and silts. The fill also contains variable amounts of potentially decomposable materials. The variations in the soil conditions

S. Kim

and the amounts of organic material within the fill have most likely caused the distressing settlement.

### **EXISTING CONDITIONS**

**Roadway (0.23 mile)** – Admiralty Way is classified as a secondary highway that is 70 feet wide on 80 feet of right of way. South side parkway width is 7 feet and north side parkway width is 3 feet. Based on the County's Road Inventory, the road was constructed in 1963. The entire pavement was resurfaced in 1981 and 1985 and was slurry sealed in 1993.

- There is cracking along the outboard lane of the roadway and unevenness of the roadway due to settlement.
- The raised median is mostly patched with AC due to settlement.
- There is curb, gutter, and sidewalk on both sides of the street with portions covered with AC due to settlement.

**Adjacent Development** – The Marina City Club is located along the south side of the roadway, and the Oxford Flood Control Basin (duck pond) and a County parking lot are located on the north side of the roadway.

**Drainage** – AC is currently patched over the curb and gutter. There are no catch basins within the limits of the project.

**Landscaping** – There is no landscaping in the medians or parkway within the limits of the project.

**Related projects** – A Marina del Rey waterline project and a sewer line project are currently in the design stage. The completion of the waterline project is tentatively scheduled for 2010. The schedule for the sewer project is not available.

The concept for a project to improve traffic circulation in the Marina by modifying lane assignments and traffic signal operations at the intersections of Admiralty Way at Palawan Way, Bali Way, Mindanao Way, and Fiji Way has been prepared. The project also includes the realignment of the intersection of Admiralty Way at Via Marina. Subject to meeting permit requirements and addressing environmental issues, project design may start in 2009 with construction by 2011.

**Street Lighting** – There is an underground-wired street lighting system with concrete poles on the median island.

**Traffic Control** – The average daily traffic (ADT) is 31,378. There is a traffic signal at the intersection of Palawan Way, west of the project limit.

**Signing and Striping** – This road is striped with raised reflective markers for two lanes in each direction.

### **PROPOSED SCOPE OF WORK**

The following structural sections are from Geotechnical and Materials Engineering Division's Geotechnical Recommendation dated June 16, 2008 (copy attached).

#### **Option 1**

- Reconstruct pavement with 6 inches of AC on 8 inches of Crushed Miscellaneous Base (CMB).
- Reconstruct curbs, gutters, sidewalk, and driveways on 6 inches of CMB.
- Reconstruct median island.
- Restore the existing street lighting, traffic loops, roadway striping, and update signage.

#### **Option 2**

- Remove unsuitable soils to a depth of 15 to 20 feet and replace with imported material (80,400 cubic yards) compacted to a minimum of 90 percent relative compaction.
- Relocate and reconstruct all underground utilities.
- Place 6 inches of AC on 8 inches of CMB.
- Reconstruct curbs, gutters, sidewalk, and driveways on 6 inches of CMB.
- Reconstruct median island.

- Restore the existing street lights, traffic loops, roadway striping, and update signage.

### **Option 3 - Recommended**

- Remove a minimum of 24 inches below the existing grade or finished subgrade, whichever is lower, and place the first layer of Geogrid on the bottom of the excavation. Then place 12 inches of imported granular material on top of the first layer of the Geogrid. Place the second layer of Geogrid. Finally, place 6 inches of AC on 8 inches of CMB.
- Reconstruct curbs, gutters, sidewalk, and driveways on 6 inches of CMB.
- Reconstruct median island.
- Restore the existing street lights, traffic loops, roadway striping, and update signage.

Under Option 1, additional settlement may occur in the future, which may require future maintenance.

Option 2 requires temporary shoring, dewatering, hazardous material disposal, and utility relocation. Traffic and environmental impacts will also need to be considered. Approximately 80,400 cubic yards of fill will need to be imported. An Environmental Impact Report will likely be required.

For Option 3, all substructure construction including the installation of the proposed sewer and waterlines should precede placement of the Geogrid to avoid disturbance to the Geogrid. If the roadway is trenched with the Geogrid in place, new Geogrid could be installed in-kind to overlap the existing Geogrids as the trench is backfilled (see typical section). According to the manufacturer, trenching through the Geogrid does not affect its ability to reinforce the base aggregate throughout the section of the road.

Option 3 is recommended for its relatively low cost compared to Option 1 and Option 2. This Option should result in a roadway less susceptible to differential settling as compared to Option 1, while reducing the frequency of road repairs. Unlike Option 2, this option can be constructed in phases with local access provided. It can be constructed without relocating all underground utilities or removing hazardous soil and water.

**UTILITY RELOCATION**

Under Option 3, some underground vaults and pullboxes may need adjustment or relocation.

**BIKEWAY PLANNING**

This portion of Admiralty Way is not a designated bike route and has no bicycle lanes.

**MEDIAN LANDSCAPING**

The raised medians along this portion of Admiralty Way are not landscaped. Landscaping the medians will require excavation below the base, which will impact the effectiveness of the Geogrid. The medians will be reconstructed with stamped concrete.

**ENVIRONMENTAL DOCUMENT AND PERMIT REQUIREMENTS**

This project is categorically exempt from CEQA. A coastal permit may be required from Regional Planning for the construction activities.

	Yes	No
Adding Traffic Lane		X
Tree Removal		X
5 (or more) Tree Removals within 500'		X
New R/W Acquisition		X
New Wall		X
Permits-to-Enter	X	

**R/W REQUIREMENTS**

Permits to enter will be required for driveway reconstruction (2) on the south side, and for sidewalk reconstruction and grading on the north side. The existing sidewalk encroaches onto the Oxford Basin Grounds, which are owned by the Department of Parks and Recreation.

**LOW IMPACT DEVELOPMENT/WATER QUALITY IMPROVEMENTS**

The shallow water table and unclassified fill beneath the road section is not suitable for implementation of low impact and/or water quality improvements.

## **TRAFFIC CONTROL**

Temporary traffic controls can be installed to allow the roadway to be reconstructed in halves with multiple phases to allow continuous traffic on Admiralty Way and access to the Marina City Club.

## **COMMITMENTS**

There are no Board or community commitments on this project.

## **OTHER AGENCY INVOLVEMENT**

Department of Beaches and Harbors

Department of Parks and Recreation

## **PLAN REQUIREMENTS**

**Road Plan Layout** -- Construction plans (i.e. line drawings) are to be prepared in Plan and Profile format by using an electronic topographic survey. The plans are required to be shown at a horizontal scale of 1"=40' with profiles shown at a vertical scale of 1"=4'. Enlarged details are to be shown at a horizontal scale of 1"=10' to show enhanced clarification of the work to be done such as joining driveways, etc.

**Geometric Plan Layout** -- A Plan SP will be required to restore the signing and striping for this project.

**Street Lighting Plan Layout** -- A Plan SL will be required to restore street lighting.

**Traffic Signal Plan Layout** -- A Traffic Signal Plan is not required.

**Traffic Control Plan Layout** -- A Plan TC will be required to provide information regarding the handling of traffic during construction.

**Division Involvement**

	<b><u>Budget</u></b>
<b>CON</b> - Coordinates utility notifications, prepares contract documents .....	\$ 30,000
<b>DES</b> - Prepares highway plans and signing/striping plans, and Right-of-Way request map .....	120,000
<b>GMED</b> - Prepares Geotechnical Report ( <b>completed</b> ) and reviews plans....	2,000
<b>MPM</b> - Reviews R/W map and request permits.....	10,000
<b>PDD</b> - Manages project .....	25,000
<b>PDD</b> - Prepares categorical exemption notice and obtain Coastal Permit .....	20,000
<b>RMD</b> - Reviews plans.....	3,000
<b>SUR</b> - Prepares electronic topographic survey ( <b>completed</b> ), and reviews plans .....	2,000
<b>T&amp;L</b> - Review signing/striping plans, prepare street lighting and traffic control plans.....	35,000
<b>Total</b>	<b>\$241,000</b>

**Preliminary Estimate (Remaining Cost)**

	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>
Estimated expenditures through 10/08	\$ 40,000	\$ 40,000	\$ 40,000
Preliminary Engineering	247,000	452,000	247,000
Construction Cost:			
Roadway	966,000	7,240,000	1,400,000
Signing, Striping	10,000	10,000	10,000
Street Lighting	210,000	210,000	210,000
Construction Contingency 15 percent	178,000	1,000,000	243,000
Construction Engineering 15 percent	<u>178,000</u>	<u>700,000</u>	<u>243,000</u>
<b>Total</b>	<b>\$1,829,000</b>	<b>\$9,652,000*</b>	<b>\$2,393,000</b>

\*The total cost for Option 2 does not include the cost of temporary relocation of all utilities, which includes sewer and waterlines; the cost of shoring, de-watering, and the disposal or treatment of contaminated water. These items could cost several million dollars.

**FUNDING**

<u>Fund Source</u>	<u>Fiscal Year</u>	<u>Phase</u>	<u>Amount</u>
Road	2008-09	PDC/Design	\$ 90,000
Road	2009-10	Design/Const	2,060,000
Road	2010-11	Const Engineering	243,000
<b>Total:</b>			<b>\$2,393,000</b>

**Schedule**

<u>Milestone Description</u>	<u>Estimated Start</u>	<u>Estimated Completion</u>
Materials Report		<b>Completed in June 2008</b>
Electronic Topographic Survey		March 2009
Notice to Proceed		March 16, 2009
Utility Search	March 16, 2009	May 11, 2009
60 percent Plan	March 16, 2009	May 28, 2009
Preliminary Grade Notice	June 1, 2009	July 6, 2009
California Environmental Quality Act Exemption	March 16, 2009	May 28, 2009
Coastal Permit	May 28, 2009	November 30, 2009
R/W ID Map	May 11, 2009	May 28, 2009
R/W Permits	June 1, 2009	November 30, 2009
90 percent Plan	July 6, 2009	August 3, 2009
90 percent Plan Review	August 3, 2009	August 31, 2009
Final Utility Notice	August 3, 2009	October 5, 2009
Final Signed Highway & Traffic Plans	September 7, 2009	November 9, 2009
R/W Certification	November 9, 2009	November 30, 2009
E-76 Approval	December 16, 2009	February 26, 2010
Advertise Clearance Form	February 26, 2010	March 16, 2010
Advertise	March 16, 2010	May 4, 2010
Bid Open		June 8, 2010
Award	June 8, 2010	August 10, 2010
Move-in	August 10, 2010	October 4, 2010
Construction	October 4, 2010	March 1, 2011

Sree Kumar  
February 26, 2009  
Page 9

**PREPARED BY:**

  
\_\_\_\_\_  
Sung Kim

7881  
Extension

**APPROVED:**

**County of Los Angeles Department of Public Works, Design Division**

  
\_\_\_\_\_  
Sree Kumar

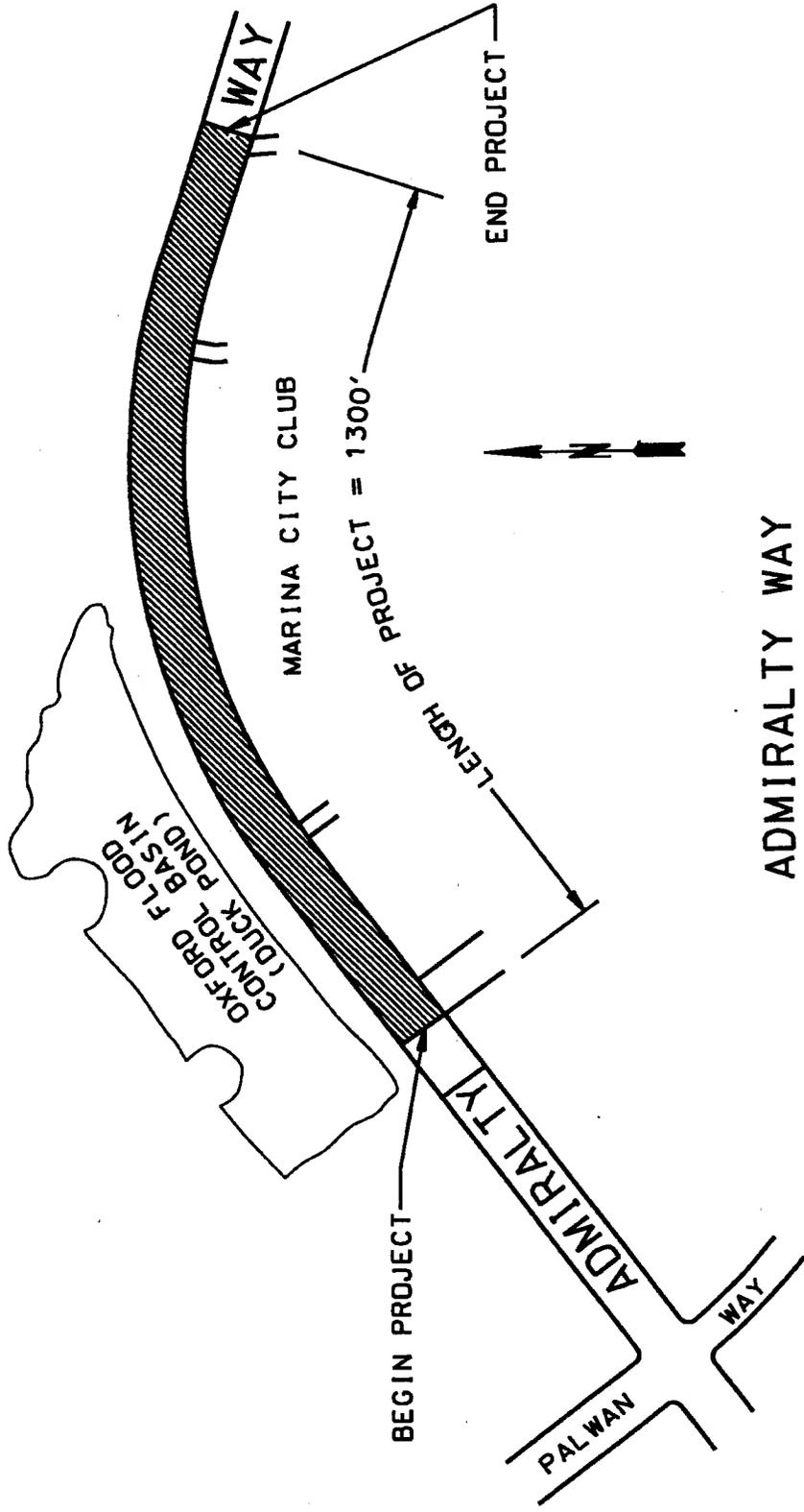
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D:\1P\DDPUB\ROAD\GENERAL\HOUSE DESIGN\HWY SECTION II\PCD\SUNGKI\ADMIRALTY WY SETTLEMENT PDC 2

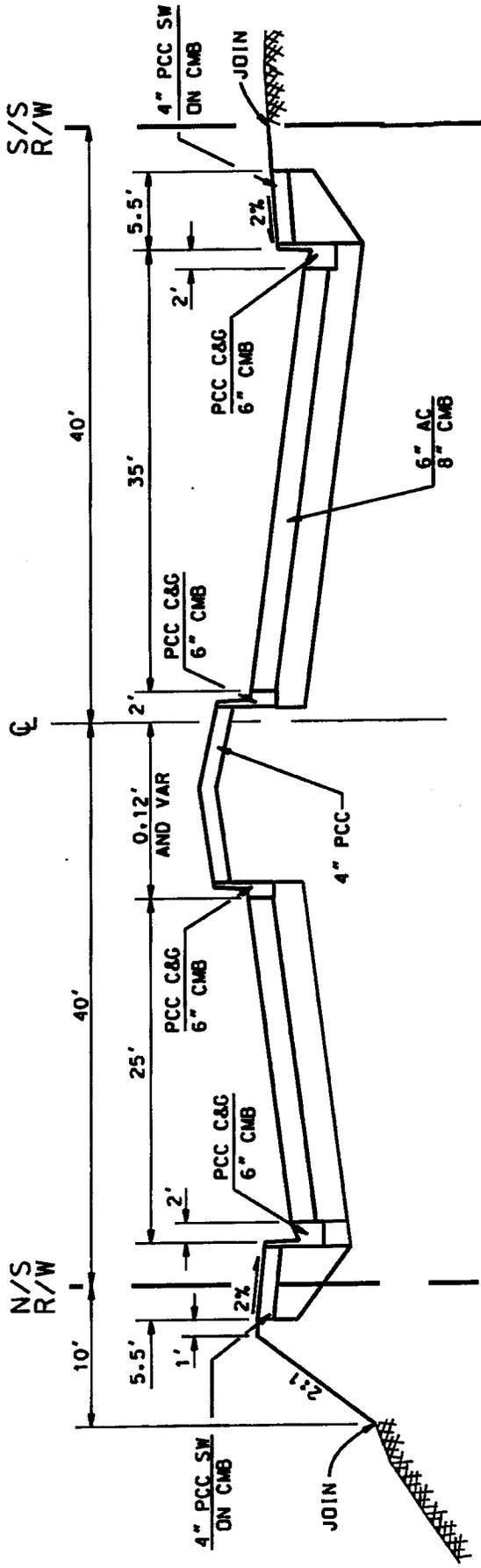
Attach.

cc: Patrick V. DeChellis  
Construction (Chenoweth, Updyke)  
Geotechnical and Materials Engineering (Lem, Bouzari)  
Mapping & Property Management (Phillips)  
Programs Development (Derakhshani, Dingman, Shih)  
Road Maintenance (Grindle)  
Survey (Steinhöff)  
Traffic and Lighting (Quintana, Y. Ruiz)  
Design (Chinn)

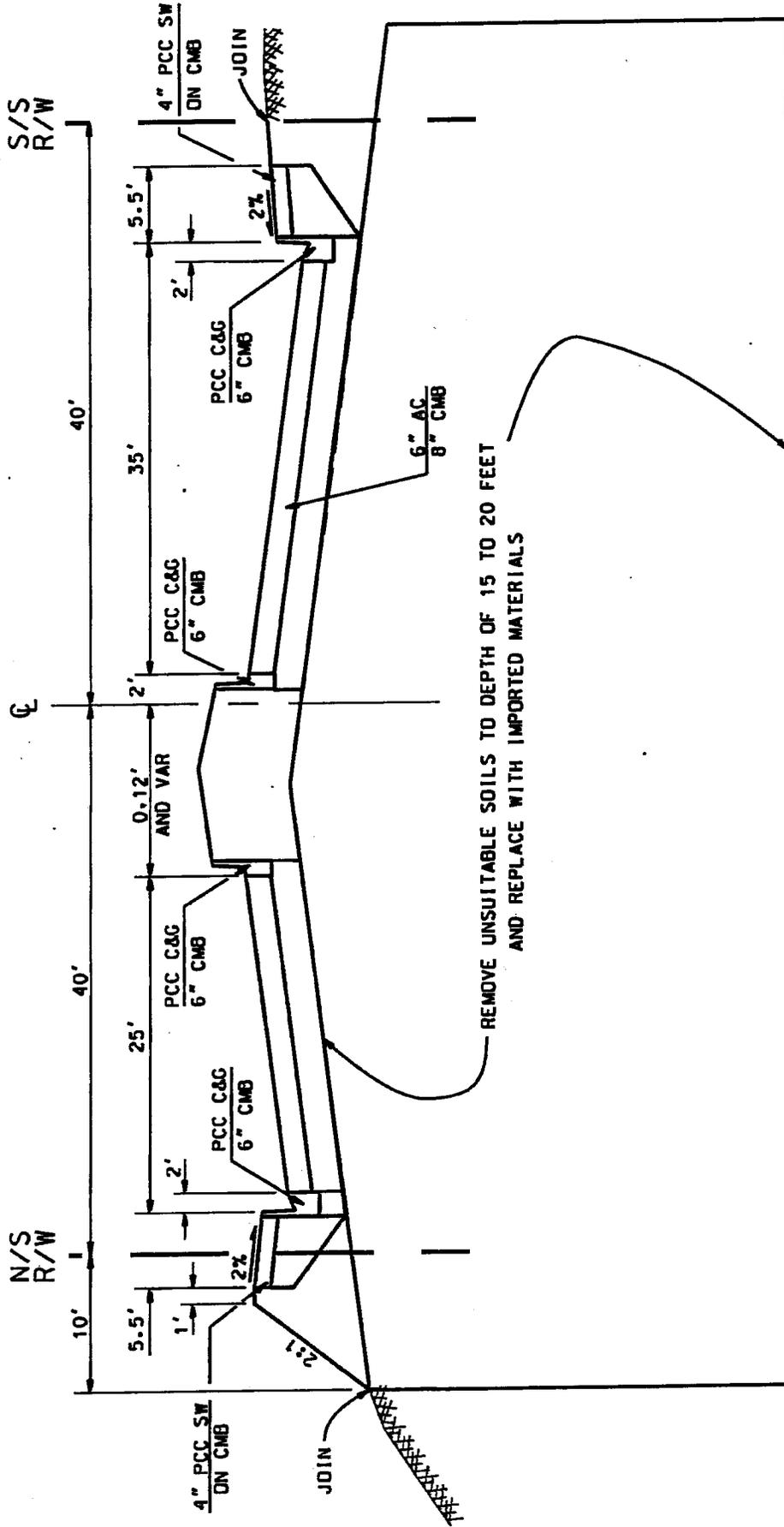


ADMIRALTY WAY

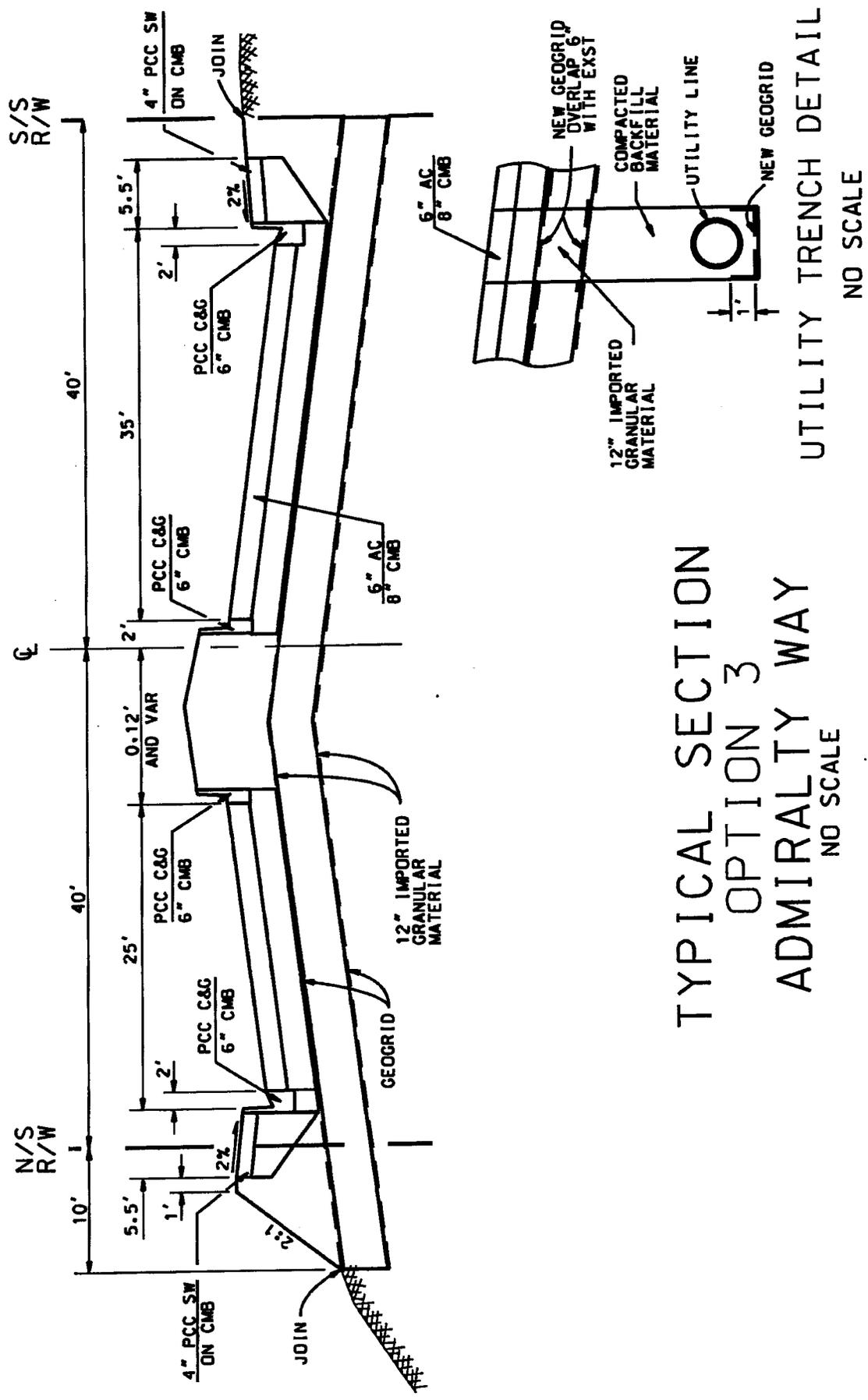
KEY MAP  
NO SCALE



OPTION 1  
 TYPICAL SECTION  
 ADMIRALTY WAY  
 NO SCALE

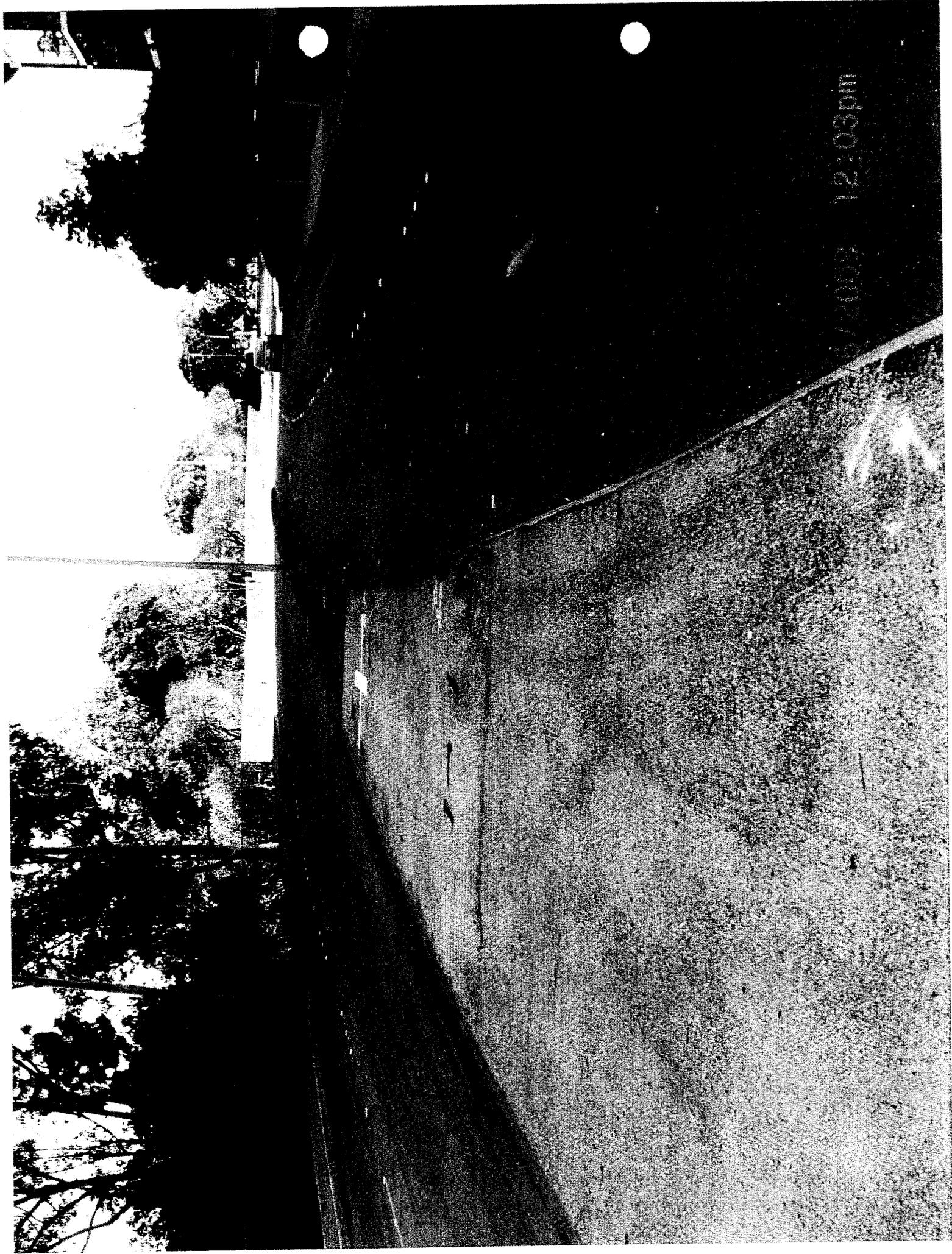


TYPICAL SECTION  
 OPTION 2  
 ADMIRALTY WAY  
 NO SCALE



TYPICAL SECTION  
 OPTION 3  
 ADMIRALTY WAY  
 NO SCALE

UTILITY TRENCH DETAIL  
 NO SCALE



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